
#### Abstract

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TAXING OURSELVES: UNDERSTANDING SCHOOL TAX ELECTIONS

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Americans have increasingly segregated themselves over the last 40 years by wealth and political orientation. I argue that this segregation affects the way communities react to school tax ballot issues, which are ostensibly nonpartisan matters. Using a database containing 232 school tax elections that took place during 2011 in 10 states, I show that in affluent communities that favor Democrats, high levels of educational attainment make it more likely that a community will adopt a tax increase. By contrast, in downscale communities that favor Democrats, economic concerns play an important role in election outcome; large percentages of homeowners decrease the likelihood of passage while large percentages of renters and poor people make tax increases more likely. In downscale Republican leaning communities, a sense of attachment to the community, indicated by large percentages of households with members who are at least 60 years of age, small community sizes and long tenures in the same house, make it more likely that the community will adopt a school tax increase.


 Finally, in affluent Republican oriented communities, school tax increases are extremely difficult to pass and become more so as community size increases.High levels of educational attainment tend to moderate the impact of Republican anti-tax ideology and high population sizes to make school tax increases more likely.

# TAXING OURSELVES: UNDERSTANDING THE RESULTS OF SCHOOL TAX 

 ELECTIONSBy

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## Dedication

I dedicate this dissertation to my children, Shira Kobren Wasserman and Ari Kobren whose courage and optimism have been my inspiration throughout.

And to my wife, Carmi Kobren, whose love, strength and patience make all things possible.

## Acknowledgements

All scholars stand on the shoulders of others. There is no such thing as a scholarly community of one, even though sometimes we allow the focus of acclaim rest on the brow of a single individual. I simply could not have completed this dissertation-or frankly, my graduate program--without the contributions of time, creativity and concern of a support community consisting of far too many people to name. Though I acknowledge the help of the people listed below, I know that through inadvertence I will leave somebody out. For that, I apologize.

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## Chapter 1

## Introduction

2011 was a difficult year for school districts all over the country. At least three years past the beginning of the "Great Recession," many school districts were seeing streams of cash previously provided to them though dedicated sources and by higher levels of government begin to dry up. ${ }^{1}$ School tax revenues based on the value of real estate were down because the bursting of the housing bubble had reduced real estate values significantly. Riding a wave of outrage at what they had convinced voters in 2010 were state and national governments overreaching their powers, Republican politicians had captured state legislatures and governors' mansions throughout the country after campaigning on promises of lower taxing and lower spending. ${ }^{2}$ They had also taken back the U.S. House of Representatives and promised a showdown with the Democratic Senate and the President over taxes, spending and government debt, all during the worst economic slump since the Great Depression. It seemed clear, at least in the states where the Tea Party had made serious

[^0]inroads, that spending on government services was going to be cut in order to pay for reductions in taxes. ${ }^{3}$

While school districts do receive some funding from the national government, the bulk of what they spend on personnel costs, supplies and other day-to-day needs comes from state income taxes, sales taxes and local property taxes. School districts have no control over how much money the national government will give them, particularly when the funding is channeled through their states. Because they have no direct claim on any state or federal funds, each school district must wait with all of the other school districts in the state to receive a share of whatever state and federal funds may be available, regardless of need and regardless of any pre-recession commitments made to teachers, parents and students.

When available funds do not suffice, school districts must either make what are often painful cuts in staffing and programming or ask for more money from those responsible for providing the schools with operating funds. School districts typically obtain operating funds from taxpayers, either indirectly, through an appropriation adopted by a more general governing body such as a city or county council, or directly, as the result of a school tax election pursuant to which voters decide whether the community should bear a heavier tax burden in order to give the school district additional funds.

[^1]This was the position in which hundreds of school systems found themselves in 2011. Though we might expect voters to reject additional taxes in tough economic times, a fair number of school districts around the country succeeded in persuading voters to adopt school tax increases. I found examples of these school districts in populous, relatively affluent, Democratically oriented places such as Portland, Oregon, as well as in small, downscale Republican oriented settings such as Advance, Missouri.

Why would school districts such as those in Portland and Advance have chosen to accept these additional tax burdens, while other school districts, in 2011, have rejected them? The answer to this question depends on the interplay between two factors that are beginning to define many American communities: affluence and political orientation (Bishop, 2009; Moretti, 2013). These two factors are not independent of one another or of other factors, and they shape the way other important community characteristics influence the outcome of school tax elections.

With respect to wealth, Warren and Tyagi (Warren \& Tyagi, 2004) have shown that school districts are becoming increasingly distinct economically. In The Two Income Trap, Warren and Tyagi observed that during the late 1990s, two paycheck families with high earning spouses took advantage of low interest rates to compete for housing in the best school districts. This drove up residential real estate prices, making some neighborhoods exclusive in ways they had not been before. Having dedicated a large chunk of their income to housing in top school districts, people living in these areas would have had a
large incentive to maintain the quality of the school district, if for no other reason than to protect the value of the investment they had made in their homes, regardless of whether they had children in the school system (Fischel, 2001).

School districts that are distinct because of their level of wealth are often distinct for another reason that tends to have a high correlation with wealth. According to Moretti, the correlation between wealth and education has been strengthening in places like Portland for the last 40 years (Moretti, 2013). People who can afford to live in places that have high home values are generally highly educated. As Moretti argues, over the last 40 years, sophisticated businesses—and particularly those in high-tech and knowledge-based industries—have begun to locate themselves in or near communities with highly educated people who can meet the demands of those businesses (Moretti, 2013). To keep these highly educated employees and to attract a pool of others, these businesses have not been shy in paying them top dollar. Not only does this dynamic make highly educated communities more prosperous ${ }^{4}$, but it also results in a geographic divergence of values, lifestyles and culture (Miller, 2014): Of this, Moretti writes:

While the divide is first and foremost economic, it is now beginning to affect cultural identity, health, family stability, and even politics. The sorting of highly educated Americans into some communities and less educated Americans into others tends to magnify and exacerbate all other

[^2]socioeconomic differences. . . . These trends are reshaping the very fabric of our society (Moretti, 2013, p. 5).

Driven by prosperity, this divergence of values, lifestyles and culture has given rise to wealthy communities that should be particularly well disposed to vote for school tax increases because (i) prosperity makes it more likely that modest tax increases of the type that are usually requested by school districts will not unduly affect an affluent voter's ability to consume or otherwise use and enjoy his or her financial resources; and (ii) having benefited economically from good education, people living in these kinds of communities, regardless of whether they have school age children, are likely to appreciate the opportunities good education will provide to the next generation and to the nation at large.

But prosperity is not the sole determinant. Just as our communities have become more economically homogeneous over the last 40 years, they have become more politically homogeneous as well. Bishop has observed that when people leave one locale for another, either because a better economic opportunity beckons or because life circumstances allow or compel a change in living arrangements, they often select neighborhoods that are populated by people who are educationally, economically and politically most like themselves (Bishop, 2009). Before about 1970, race, ethnicity and religion were among the key factors people considered when deciding where to live. According to Bishop, over the last 40 years, political orientation has become increasingly salient; the
kinds of politicians a community favors has begun to supplant other considerations for people making home location decisions. ${ }^{5}$ Thus, Edsall notes:

Over the past three-and-a-half decades these mutually reinforcing trends have resulted in a surge in "landslide" counties, meaning counties in which one of the [presidential] candidates won by 20 points or more, a trend documented by Bishop and Cushing. At the time of the 1976 presidential election, 26.8 percent of Americans lived in landslide counties; by 2000, that had grown to 45.3 percent. By 2012, the percentage of people living in landslide counties shot up further still to 52 percent. (Edsall, 2013) Bishop relies on data from counties, but his argument should apply to smaller communities as well. People don't move to states or counties; instead, they move to neighborhoods where they feel comfortable. While not synonymous with neighborhoods, school districts-and particularly small school districts—can be thought of as collections of neighborhoods because school district boundaries usually encompass neighborhoods that are geographically close to existing schools, often without regard to other municipal boundaries. ${ }^{6}$ If people are moving to neighborhoods where they feel comfortable politically, then given the fierce opposition to higher taxes that has been the hallmark of the

[^3]Republican Party since at least the Reagan administration, we should expect it to be much harder for a school district in a Republican area to win a tax increase from voters than its counterpart in a Democratic area. To the extent that the parties have polarized at the mass level-a contentious issue in itself (Abramowitz, 2012; Abramowitz \& Saunders, 2008; Abrams \& Fiorina, 2012; Fiorina, Abrams, \& Pope, 2010; Sussell, 2014)—the effect of partisanship on school funding choices should be magnified.

Though affluence and political orientation play an important role in explaining why some types of school districts passed tax increases at higher rates than others, I do not argue here that all we need to know about a community to predict whether it is likely to adopt a tax increase is whether it prefers Democratic politicians to Republican ones and whether it is relatively rich or poor. There is a significant amount of variability among districts with the same political orientation and general level of affluence, and so something more nuanced is required.

I argue, instead, that different levels of wealth combine with a Republican or a Democratic political orientation to affect the way a number of other factors influence school tax elections. Affluent Democratic communities respond to factors that downscale Democratic and all Republican communities do not. Likewise, downscale Republican communities are unlike communities populated by Democrats and more affluent Republicans in the things that sway school tax elections.

By beginning with the recognition that school districts like Portland and Advance are economically and politically different from each other, it becomes easier to understand that we should not expect the factors that influenced voters to adopt the tax increase in Portland to have been equally influential in Advance. Looking through lenses colored jointly by wealth and political orientation enable us to see the factors that maximize the likelihood that school districts will behave like the Portland School District and the Advance School District did by adopting tax increases during tough economic times.

It is important to note that I am focusing on the characteristics of the places willing to pass tax increases and not on the characteristics of voters who are willing to vote to increase school taxes. The distinction, though subtle, is important because, for the most part, I do not have the individual level data that would enable me to say that people with particular demographic characteristics tend to vote in a particular way in school tax elections. This is because, for the most part, that kind of data, on a school district by school district basis is extremely expensive and difficult to collect, and, for that reason, does not exist anywhere. ${ }^{7}$ A researcher is on solid ground in describing the characteristics of a place's population but commits the ecological fallacy when he or she attempts to impute those characteristics to individuals who live in the place he or she is describing.

[^4]
## Paradigms and Premises, Past and Present

All scholars stand on the shoulders of those who came before them, and I am no exception. As I will discuss more thoroughly in Chapter 2, a vast literature regarding the factors that influence school tax elections has developed since the 1950s. While that literature provides many of the building blocks required for solving the puzzle of school tax elections, it suffers from three basic problems.

First, school districts are often too small to be the subject of carefully constructed public opinion surveys, and so scholars looking for data on school tax elections have relied heavily on case studies in which particular school districts or even small groups of school districts have been the focus of investigation. Research of this nature can tell us in great detail about the forces that shaped a tax election in one community or even in one group of communities, but there is no way to be sure that the community or communities studied are representative of any meaningful larger group of school districts. As Gimpel and Schuknecht point out, local politics is often steeped in context, (Gimpel \& Schuknecht, 2004) and so studies that are geographically focused may turn on factors that are unique to the setting being studied.

Second, many of the studies are old and based on data from the prosperous 1950s and 1960s when baby boomers were flooding into school systems; those conditions no longer prevail (Lentz, 1999). Today, there are fewer children, the economy is growing slower than it did at the time many of the studies were published and family income growth has been stagnant through much of the last thirty years. Over the time period in question, Americans have not been consistent about how they have wanted from their governments to
respond to the prevailing economic and social conditions. At times, they have wanted a powerful and active government exemplified by Lyndon Johnson's administration while at other times, they've wanted the smaller government championed by Ronald Reagan. Levels of trust in government have varied over the era as well (Hetherington, 2006). All of this could have influenced the willingness of voters to pay more in taxes that scholars have captured in their research. Factors important in one part of the era could therefore have little applicability at another point in time.

Finally, and perhaps more importantly for present purposes, is the basic premise that underlies much of the research. That premise was simply that the people in all of the school districts studied represented a cross-section of public opinion on the matter (See, e.g. Berkman \& Plutzer, 2005). In other words, the research assumed that attributes such as school district wealth, the percentage of homeowners, parents, homeowners, African-Americans, senior citizens, college graduates and other groups were independent of each other in their impact on school tax elections, and that the impact of these attributes would be constant across settings; school tax elections would turn on the relative presence of these community attributes. Parents with school-age children, for example, could be counted on to want more public spending for their children, and so higher percentages of households with children in a school district would improve the likelihood that a tax increase would pass (See, e.g. Piele \& Hall, 1973, pp. 100-101).

I take issue with this premise. What if the impact of high levels of education on school tax elections depends on whether the community prefers Democratic politicians to Republican ones? What if the level of educational attainment makes more difference in affluent Democratic communities than in affluent Republican ones? A failure to account for these conditional effects would be a serious obstacle to an accurate understanding of community decisions on school tax issues. As communities become increasingly homogeneous-as they have over the past 40 years (Bishop, 2009; Sussell, 2014) -then the impact of these conditional effects would become even more important. It could be that the failure to take these conditional effects into account explains why scholars have found that many of the factors they claimed were important in explaining the outcomes of school tax elections in some places had little or no effect in others.

Addressing this possibility, Corliss Lentz proposed a new paradigm or understanding of school tax elections (Lentz, 1999). She argued that in order to understand school tax elections, one must recognize that the character of a community depends on the fact that people prefer to live in communities composed of like-minded people. This self-segregation would produce distinctive kinds of communities that would react to school tax elections in distinctive ways. In her study of Illinois school district referenda, she grouped school districts by the land use categories applicable to the real estate upon which the school districts were located. She showed that that the explanatory power of the variables in her model varied by land use type and that she was able to explain
more of the variation between districts when she grouped her school districts by land use type ${ }^{8}$ than when she applied her model to all of the school districts in her dataset at the same time. She concluded that:

This study dispels the notion that one theory of school finance applies to all districts. Using a local typology provides more predictive power than a statewide analysis and identifies referenda predictors that are more useful in some jurisdictional types than in others.

Though, for reasons I will provide in Chapter 3, I do not believe that Lentz's land use based categories are practical or useful for this study, I agree with Lentz, in principle, and that is why I will argue that to understand the factors that shape a school tax election, one must first classify school districts by type and then analyze school districts election outcomes within the group to which those school districts have been assigned. Lentz used a classification system based on five land use categories for school districts located in Illinois, reasoning that property owners with the same class of land would have similar attitudes about taxes levied on that class of land (Lentz, 1999). As I have already explained, demographic changes in the United States over the last 40 years have created communities that are defined by their political orientations and their levels of wealth. Recognition of this fact will allow me to use an even more parsimonious classification system based on those dimensions.

[^5]I apply this framework to a group of 232 school districts that considered tax increases in 2011. After sorting these school districts by partisan orientation and affluence, I suggest, for each group of districts, a theory to distinguish the districts in the group that adopted tax increases (the "Adopter districts") from those that rejected them (the "Rejecter" districts). To test my theories, I apply a general-purpose logistic regression model that includes variables representing my theories as well as alternative ones suggested by the literature. I conclude each chapter with case studies of Adopter and Rejecter districts to illustrate and extend the statistical analysis.

## Dissertation Roadmap

This dissertation proceeds as follows:
In the next chapter, I provide a brief discussion of the existing literature on school tax elections. The chapter has two purposes. The first is to introduce the main theories scholars have advanced over the last 50 years to explain why some communities adopt school tax increases while others do not. The generalpurpose logistic regression model I develop in Chapter 3 depends on these theories.

The second purpose is to show how existing scholarship in the field is in conflict and to lay the groundwork for my thesis that understanding school tax elections requires us to group our cases by political orientation and affluence. To bring some order to the discussion, I rely on a theoretical framework provided by Clark and Wilson that classifies these theories as "material benefit" theories,
"solidary benefit" theories and "purposive benefit" theories (P. B. Clark \& Wilson, 1961).

In Chapter 3, I introduce the datase to be analyzed and the method of analysis, and I present evidence that the four-cell classification system I propose to use provides a meaningful and powerful way of analyzing the data. I also provide an overview of the demographic characteristics of the districts in each group of districts. Finally, I specify a general-purpose logistic regression model I will use to analyze the school districts assigned to each group.

In Chapter 4, I include all of the Democratic leaning school districts where median home values are above the dataset median. I call these the "Googleplex" districts. ${ }^{9}$ The Googleplex group is composed of two types of communities: "brain hubs" where people earn their livings through creative or intellectual activities that generally require a college education, and "servants' quarters" where people who provide services to the brain hubs or do work that does not require college education live.

School districts in brain hubs such as the Portland, Oregon School District 1 J (the "Portland school district"), of which I provide a case study, owe their prosperity to the presence of a large number of highly educated people who make their livings in knowledge-based and high-tech industries. Democratic brain hubs are the most likely type of community to adopt a tax increases for two reasons. First, high levels of education tend to lead to wealth, and high levels of

[^6]wealth make modest tax increases more affordable. Second, Democrats tend to believe that education is a social good in and of itself, (Haidt, 2013) and so, when tax increases are affordable, highly educated Democrats tend to prioritize education.

Servants' quarters districts such as Oregon's St. Helens School District 502 (the "St. Helens school district), of which I also provide a case study, are not as highly educated as the Adopter districts in the group and are less willing to adopt tax increases. Lower levels of educational attainment lead to lower levels of wealth, and with lower levels of wealth, a school tax increase was not as affordable in the St. Helens school district as it was in the Portland school district. For servants' quarters districts, tax increases pose a much greater threat to family budgets than they do in brain hubs.

In Chapter 5, I include all of the remaining Democratically oriented districts. These tend to be downscale communities, and because they tend to favor somewhat more centrist politicians such as Bill and Hillary Clinton, I refer to them as the "Clintonland" districts. Personal economic factors, such as home ownership and poverty, matter in this group of districts. Though school tax increases eventually affect everyone in a community, large percentages of downscale homeowners tend to bode ill for school tax increases in this group because these hard-pressed homeowners are likely to feel the impact of increases in the school tax more directly, well before renters and poor people do. As an illustration of the kind of Clintonland school districts that were able to pass tax increases in 2011, I profile the Parma City School District in Ohio (the "Parma
school district"); as an illustration of the kind of Clintonland school district that could not pass a tax increase in 2011, I profile the Amherst Exempted Village, Ohio School District (the "Amherst school district").

Chapter 6 focuses on the downscale, Republican oriented districts. I call these the "Smallville" districts because they tend to be rural and have small, sparse populations. ${ }^{10}$ As Republican oriented communities, they tend to be skeptical of tax increases. The people who live in these districts are less mobile than their counterparts in the groups of districts discussed in Chapters 4, 5, and 7, preferring to live or remain in places where a feeling of connection to the community is crucial for adopting higher school taxes. In places where there is little transience and where the residents have occupied the same homes for extended periods, I argue that community attachment makes it easier to get a tax increase passed. I profile Missouri's Advance R-IV School District (the "Advance school district") as an example of a community that overcame what I call the "Republican Headwind," a standing predilection to oppose increased taxation, in order to pass a school tax increase. I also profile Ohio's Fairborn City School District (the "Fairborn school district") as an example of a community that could not overcome the Republican Headwind.

And finally, I collect all of the Republican oriented school districts that have median home values higher than the dataset median in a group I call the

[^7]"Goldwater Country" districts. ${ }^{11}$ I discuss these districts in Chapter 7. Like the districts in the Googleplex group, they tend to have highly educated populations. While residents in the Goldwater Country districts appreciate the value of high quality education just as their highly educated peers in the brain hubs of the Googleplex group do, their high levels of educational attainment tend to make their voters more partisan and ideological. I argue that this makes those voters more sensitive to national Republican messages about government waste and incompetence. That message extends not just to national institutions, but to local ones such as public school districts as well. Being highly skeptical and demanding of government, they "reward" school districts by sometimes approving school tax increase requests when those districts competently provide the educational services residents expect. Chapter 7 concludes with case studies of Ohio's Madeira City School District (the "Madeira school district"), which voters "rewarded" with a tax increase, and Arizona's Cave Creek Unified School District \#93 (the "Cave Creek school district"), which voters "punished" by rejecting the requested tax increase.

Chapter 8 sums up the project with a brief discussion of my general results, an assessment of the limitations of my analysis, and suggestions for future research. Chapter 9 raises some final thoughts about the broader meaning of my research.

[^8]
## Chapter 2

## Understanding School Tax Elections: The State of The Literature

Over the last 50 years, scholars have advanced a number of hypotheses to explain the results of school tax elections. While scholars have approached the question from different angles, each perspective flows from a conceptualization of benefits. For the purposes of organization, I discuss these hypotheses in terms of the benefits people expect to receive for agreeing to increase their tax burdens.

Previous research has reached a number of different conclusions about the factors that influence school tax elections. This is not to say that 50 years worth of research on school tax elections has been for naught. Each theory previously advanced provides a piece of the puzzle. In this chapter, I describe the major theories developed in the field. I do this for two reasons. First, I wish to provide a convenient way of referring to concepts to which I will return. Second, my analysis requires the creation of a statistical model that can pit these major theories against each other in different settings. For purposes of organization I discuss these theories in terms of the benefits people receive for agreeing to take on additional burdens.

People choose to assume the burdens of collective action, such as agreeing to pay additional taxes, because they expect to receive one or more of three basic kinds of benefits: material benefits, solidary benefits and/or purposive benefits (P. B. Clark \& Wilson, 1961). When people act with the expectation of
material benefit, they expect that the rewards will exceed the sacrifices they make. Such a benefit can be either a short-term gain or one that appears after the passage of time. This does not mean or imply that the only beneficiaries of the act in question are the actors. Action taken for the benefit of the actor can also result in positive externalities that benefit others, such as when a parent votes for a school tax increase. In attempting to secure a first class education for his or her children, the parent may reason that voting for a tax increase is less expensive than enrolling his or her children in private school. Though the parent benefits through lower education costs compared to private school tuition, children, teachers, school system employees and other parents in the community may benefit as well.

People seek a solidary benefit when they act, not to receive a material benefit, but to receive the internal satisfaction that comes from "socializing, congeniality, the sense of group membership and identification, the status resulting from membership, fun and conviviality, the maintenance of social distinctions and so on" (P. B. Clark \& Wilson, 1961, pp. 134-135). People seek purposive benefits when they act pursuant to "ideological or issue-oriented goals "(Berry, 1989, p. 47) or for the purpose of "having contributed to a worthy cause" (Mahood, 1990, p. 12) without expecting a reciprocal material benefit of any kind at any time in the future. In both of these cases, the reward for taking the action is intrinsic to the person or the actor. A gift to a medical charity that seeks to eliminate a particular type of disease would be made in pursuit of a solidary benefit if (i) neither the giver nor any of his or her friends or family suffer from the
disease (and do not expect to do so in the future) and (ii) the giver expects to receive recognition by others whose opinion and good favor he or she seeks or values. A person would be acting in pursuit of a purposive benefit if (i) neither the giver nor the friends and family of the giver suffer from the disease (and do not expect to do so in the future) and (ii) the giver sees the gift as a contribution to a social good.

## Hypotheses Focused on Material Benefits

## The Homeowner Hypothesis

People sometimes vote to adopt or reject additional taxes for the benefit of their school districts because they hope to receive material benefits. Since school taxes are generally levied against real property, one explanation of the behavior focuses on homeownership. Thus, for example, Fischel's The Homevoter Hypothesis holds that much of local politics is driven by selfinterested homeowners who make political decisions based on the impact those decisions will have on home values (Fischel, 2001). Because "homevoters" recognize that a key determinant of home value is the presence of high quality local amenities, such as good elementary and secondary public schools, when confronted with a political choice, they take the action most likely to maintain or increase the values of their homes.

Following this logic, the "Homeowner Hypothesis" holds that a community with a large number of homeowners or homes with high values will be likely to adopt a tax increase out of self-interest if its homeowners believe that the proposed tax increase will help them profit when it comes time sell their homes.

This is why, for example, Bradbury, Mayer and Case found that home prices performed worse in communities that had slower increases in school spending and that increases in school spending have a strong positive effect on home prices (Bradbury, Mayer, \& Case, 2001). Warren and Tyagi showed that professional, two-income families bid up home prices in school districts with exceptional schools so that their children could attend them (Warren \& Tyagi, 2004).

Having a large percentage of homeowners or high real estate values is far from a guarantee that such a school district will view all school tax increases in a favorable light. Fischel's argument is that homeowners will vote for tax increases only to the extent that such an increase can be capitalized into the value of their homes. If homeowners believe that a tax increase will not positively affect the value of their homes, Fischel's theory predicts that they will vote against it. According to this argument, because they perceive themselves as being primarily and adversely affected by additional school taxes, homeowners will vote against school tax increases.

The evidence on this point is mixed. Citing several studies from the mid1960s, Piele and Hall concluded that "a majority of the studies report findings indicating that there is no statistically significant relationship between homeownership and voting for or against a school financing election" (emphasis original) (Piele \& Hall, 1973, p. 101). Noting that educational spending and taxing preferences are correlated, Berkman and Plutzer cited Gallup/Phi Delta Kappa polls conducted between 1981 and 1986, General Social Survey polls
conducted between 1985 and 2002 and American National Election Studies conducted between 1984 and 2000 to argue that, on average, homeowner support for increased spending on education was between 5 and 12 percentage points lower than the support given to education spending by renters. ${ }^{12}$

## The Gray Peril Hypothesis

Closely related to the Homeowner Hypothesis are hypotheses relating to the impact of older voters on school tax elections. The argument here is that older voters prefer to live in low tax areas and that they are likely to vote against additional school taxes (or school spending that seems likely to lead to new taxes) because they (i) are more likely than younger voters to be homeowners; (ii) live on fixed incomes and so cannot count on receiving additional money from other sources with which to pay the additional taxes; (iii) wish to conserve their own resources by keeping taxes low; and (iv) do not have children who are enrolled in the school system and would prefer that additional taxes be used for something from which they will derive greater benefit (See Berkman \& Plutzer, 2005, p. 129). Scholars who study school tax elections refer to this idea as the

[^9]"Gray Peril Hypothesis": As the percentage of older voters in a community increases, the likelihood that the community will adopt a tax increase decreases.

After a review of the early studies on the point, Piele and Hall concluded that "the unanimity of the research supports the idea that older voters were less likely to support school financial issues at the ballot than younger voters. (Piele \& Hall, 1973, p. 104). Many subsequent studies are in agreement (see, e.g. Rasinski and Rosenbaum, 1987, Brokaw, Gale, \& Merz, 1990; Chew, 1992; Gradstein \& Kaganovich, 2004; MacManus, 1997; Tedin, Matland, \& Weiher, 2001).

Despite Piele and Hall's mid-1970s conclusion about the "unanimity of the research," the recent research on the Gray Peril Hypothesis does not always conclude that school districts with large populations of older citizens are less likely to adopt tax increases (Berkman \& Plutzer, 2005, Chapter 7). While later studies agree that though, sometimes, older Americans do take concerns about material benefits into account when they vote on school tax increases, those material benefit concerns cut the other way: Because older voters are disproportionately homeowners who anticipate that they will soon need to cash out the equity accumulated in their homes, they are willing to invest more tax dollars in the school district so as to ensure that they can make a good profit when they sell (Poterba, 1998; Berkman and Plutzer 2004). Ehrenberg and Ehrenberg, Smith and Zhang, in a study of data from New York, found that the greater the proportion of county residents older than 65, the less likely it was that a county's school budget would be defeated. (Ehrenberg, Ehrenberg, Smith, \&

Zhang, 2002). In a particularly nuanced study Lambert and colleagues found that while seniors who had recently relocated to Cumberland County, Tennessee, in order to benefit from its low tax rates, were unwilling to support a hypothetical tax increase in support of the local school system, other seniors were more willing to support a hypothetical increase in school taxes if they were most concerned with home prices (Lambert, Clark, Wilcox, \& Park, 2009a).

## The Parenthood Hypothesis

Other scholars argue that parents tend to be more supportive of school tax increases because of the material benefits they expect to receive if the tax passes. Aside from school district personnel, school-aged children and their parents are the proximate beneficiaries of revenues raised by increases in school taxes. Primary and secondary education are, after all, among the most basic of public services provided by local government. Few can disagree with the notion that everyone requires at least some level of education in order to become a productive member of society; there is little controversy about the proposition that if all are educated, the community as a whole benefits. Education enables people to develop the skills required by our economy, making them self-sufficient, less likely to engage in crime or other antisocial activities and less likely to require the alms of others or the support of society at large through the government. Once their children become economically self-sufficient, parents can redirect family resources toward the needs and wants of other children or of the parents themselves. While parents could be required, individually, to pay for
the educational services given to their children, providing that education through a school system that can take advantage of economies of scale is much more cost efficient. The "Parenthood Hypothesis" takes these considerations into account and holds that the more households there are with school-aged children in a school district, the more likely it is that the school district will adopt a tax increase (Chew, 1992; Preston, 1984).

The research on this point seems consistent over time. Summarizing studies conducted before 1973, Piele and Hall found a "strong and consistent" line of evidence indicating that parents with children who attend public school are generally more willing to support tax increases for public schools than people who do not currently have children in the public school system (Piele \& Hall, 1973, p. 100). Berkman and Plutzer found "modest gaps between parents and non-parents [in their willingness to vote for school tax increases] . . . with differences ranging between 5 and 11 percentage points" (Berkman \& Plutzer, 2005, pp. 42-43).

Despite this general agreement that having children enrolled in the public schools makes parents more likely to vote for tax increases, a few studies moderate or even contradict this view. In their review of studies on the impact of parenthood on school tax elections, Piele and Hall noted that between 1969 and 1792, the percentage of parents who told surveys that they would support additional taxes for school purposes fell from 51\% to 37\%, (Piele \& Hall, 1973, pp. 101-102). In a later study of a school tax election in Eugene, Oregon, Hall and Piele warned that "parental status is a relatively unimportant factor for
differentiating between high- and low-support polling places in school budget elections. Including Gallup survey results and Wilson and Banfield's most recent analysis, there now appears to be substantial evidence seriously questioning the longstanding belief that schools can look to parents rather than to the general public for greater support in school financial elections" (Hall \& Piele, 1976, 455). Similarly, Chew found only modest a relationship between parental status and voting on school tax issues: the difference between parents and non-parents in the likelihood of voting in favor of a tax increase was only two-thirds of the difference between conservatives and liberals voting on the same issue (Chew, 1992) In their study of a school bond election in two Houston area school districts, Tedin et al also reported that having children in the public schools was only significant for white voters. (Tedin et al., 2001)

## The Educational Attainment Hypothesis

One last explanation for results in school tax elections that focuses on material benefits is the "Educational Attainment Hypothesis," which holds that the higher the level of educational attainment in a school district, the more likely it is that the school district will pass a tax increase. The research is unequivocal across time on this point (see Berkman \& Plutzer, 2005, pp. 44-45; Piele \& Hall, 1973, pp. 117-118 and the studies summarized therein). All things being equal, college graduates are at least 10\% more likely than people who never completed high school to support higher school taxes (Berkman \& Plutzer, 2005, p. 51). The reason is that by first-hand experience, better educated people often see
that they are wealthier and have more prestige than people who have not had as much education. If they are also parents, they may find it to be more cost effective to purchase excellent education for their children through a public system funded by tax payments than to enroll them in a private school that requires them to make tuition payments.

But good schools are not only a matter of material benefit for welleducated voters. Some relatively recent research notes that good school systems are important for communities that are trying to attract or retain businesses. Summarizing this research, Weiss pointed out that "the available evidence suggests that businesses seek an existing educated workforce—or, increasingly, the ability to draw such a workforce to their chosen location. . . . The need for businesses to draw from an existing educated work force often presumes the need for quality local public schools" (Weiss, 2004, p. 16). Cohen listed "quality labor force with technical skills" and "good schools for employee recruitment and their children," as key factors companies seek when deciding where to locate their back office operations (Cohen, 2000, p. 8, Table A). She also listed the existence of "poor quality urban education systems, which generate a low-quality labor force, as the top reason corporate real estate executives give for not locating facilities in central cities. She went on to write:

Cities whose public officials have focused on their education and training systems are attractive to growth sector companies on the move. . . A company cannot expect [highly educated] people to relocate to a place
that is undesirable. Desirability includes a good elementary and secondary school system for employees' children (Weiss, 2004, p. 15).

## Explanations Based on Purposive and Solidary Benefits

Rasinski and Rosenbaum warn us that material benefits are not everything when it comes to understanding school tax elections. Analyzing data from citizens considering an Illinois school tax ballot issue, for example, they found that while material benefit factors such as parenthood and concerns about property values explained only 5\% of the variance in their data, solidary and purposive benefit factors such as attitudes about the schools explained about 7\% of the variation. Among the people most likely to vote, the gap was even larger: In their study, the factors reflecting solidary and purposive benefits explained four times as much of the variance in the data set than the other factors did (Rasinski \& Rosenbaum, 1987).

The Gray Peril Revisited Hypothesis
One factor that influences the outcomes of school tax elections by conveying solidary and purposive benefits to voters is community engagement. ${ }^{13}$
${ }^{13}$ A "community" is "an image in the mind of an individual, of a group toward whose members she feels a sense of similarity, belonging or fellowship" (Wong, 2010, p. 6). For Wong, the boundaries of a community are flexible and encompass the people for whom we feel an obligation. What is important about this definition is that it focuses on relationships among people and not on geographic locations. In the United States, school districts may be coterminous with other, larger jurisdictions, contained within larger jurisdictions or imposed on multiple other larger jurisdictions. Thus, school districts, in and of themselves, are not necessarily "communities" in Wong's sense. The more the people in the school district see themselves as having shared values and a shared destiny and are willing to pay for public goods for each other, the more likely it is that the

According to Hall and Piele, "Virtually unanimously, the studies agree that the individuals most likely to support school issues are those who have relatively strong community ties and who feel that they in some way contribute to and are affected by community and educational decision-making" (Hall \& Piele, 1976, p. 451).

One of the ways community engagement manifests itself is in the presence of older adults in the community. While, as previously discussed, the presence of senior citizens in the community is usually regarded as an explanation that focuses on material benefits, large percentages of seniors in a community can also sometimes indicate community attachment. Poterba (Poterba, 1998, 318), therefore, suggests that altruism might be a better model for evaluating the motives of senior citizens who participate in school tax elections. In support of this contention, he cites Logan and Spitze, (Logan \& Spitze, 1995) who found that older people responding to a survey on family and public policy issues were more inclined to take the position favoring the young over the old. Ehrenberg et al, in a study of New York School districts, found that older voters were no more likely to vote against school budgets than younger voters and that the chances of budget passage improved as the number of
school district will be a true community. According to Wong, "political attitudes about the obligations of government to redistribute resources and decisions about political participation are "helping behaviors" that are based not only on values and calculations of self-interest, but also on assessments of broader interests that are often articulated in terms of "community." If the potential beneficiary of an opinion voiced, a meeting attended, or an initiative supported is part of my community, I am more willing to help" (Wong, 2010, p. 211).
residents who were at least 65 years old in a school district increased (Ehrenberg et al., 2002).

Berkman and Plutzer refined this suggestion even further by reporting evidence that the tenure of older people in a community might determine whether they support or oppose tax increases:

As originally explicated by Hirschman (1970), loyalty is a powerful motivator of behavior that can conflict with instrumental self-interest. Given the wide support that appears in the public for their public schools despite their questionable performance . . . as well as the central role that a school system plays in the life of a community, we should not expect older members of the community simply to "abandon" the schools as they age. Long-standing residents have roots in their community. They may have themselves attended the local schools and, if not, it is likely that their children or grandchildren did. They have likely been linked to the schools through sports, cultural activities, or community functions held on school grounds (Berkman \& Plutzer, 2005, pp. 133-34).

This "Gray Peril Revisited Hypothesis" holds that as the percentage of senior citizens in a school district increases, the more likely it is that a school tax increase will be adopted.

The Racial Diversity Hypothesis

Another way that community engagement has been conceptualized and examined is as the degree of racial or ethnic homogeneity that prevails in a
community. ${ }^{14}$ The "Racial Diversity Hypothesis" holds that as a community becomes more racially diverse, it also becomes less likely to support a tax increase for the school district.

According to Bali, "race becomes important if different racial groups receive or perceive different outcomes from a measure" (Bali, 2008, 429). Thus, Alesina et al offer a model that demonstrates that "more ethnic fragmentation leads to fewer resources pooled together to provide nonexcludable public goods" such as education (Alesina, Baqir, \& Easterly, 1999). Tedin found that whites were less supportive of a school equalization measure in two Texas school districts when they thought that the measure would mostly benefit blacks, even though the measure would benefit their district overall (Tedin, 1994). Silverman found that New York State school districts were less likely to pass tax increases if they had large minority populations (Silverman, 2011). Ehrenberg et al found that, with all other things being equal, "districts with 10 percentage points more Hispanic American residents appeared to have a five percentage point higher percentage of voters voting against" a school budget proposal (Ehrenberg et al., 2002).

## The Community Affinity Hypothesis

Community engagement can also be conceptualized in terms of

[^10]participation with or alienation from the community at large. Under the "Community Affinity Hypothesis," the more tightly knit the community, the more likely it is to vote in favor of a school tax increase. A study by Clark, Lambert, Park and Wilcox, which I have already cited in my discussion of the Gray Peril Revisited Hypothesis, supports this claim. They found that senior citizens who had migrated to Cumberland County, Tennessee and had volunteered with the community were more supportive of a hypothetical tax increase for the benefit of the schools than were senior citizens who had not volunteered. They concluded that "integration into the community" as evidenced by volunteering, "may also be important" in determining their level of support for a tax increase (C. Clark, Lambert, Park, \& Wilcox, 2009, p. 12).

On the other hand, Tedin, Matland and Welher write that "a consistent theme in the literature is that a principal source of "no" votes are those alienated from government," and their findings confirmed that the greater the distrust of government was, the more likely it was that a bond measure would be defeated (Tedin et al., 2001). Lowery and Sigelman made a similar finding with respect to a ballot measure that sought to limit school property tax increases, (Lowery \& Sigelman, 1981), and Silverman also provided evidence that political alienation, particularly with respect to the governance of local school systems, paves the way for a school tax election defeat (Silverman, 2011). According to Tedin et al, "one interpretation is that a "no" vote by the alienated reflects a backlash against the establishment" (Tedin et al., 2001, p. 275).

## The Partisanship Hypothesis

The second of the two solidary/purposive explanations discussed in the literature focuses on partisanship and ideology. "Partisan attitudes might summarize attitudes toward government, taxes and even the schools" (Piele \& Hall, 1973, pp. 124-125). Despite Piele and Hall's insistence that partisan attitudes should not be discounted as an explanation for school tax victories or defeats, through the early 1970s, there was no evidence that these kinds of attitudes played any role in a school tax election. Being alienated from national politics did not appear to influence participation in local politics (Templeton, 1966) and voting for increased school funding did not correlate with votes for black "liberal" candidates in the 1969 Los Angeles, California mayoral and school board elections (Hahn \& Almy, 1971). Boskoff and Zeigler, found no relationship between a person's ideology and the way he or she voted on a local school bond issue. (Boskoff \& Zeigler, 1964)

Since the mid-1970s, though, scholars have begun to report evidence supporting the idea that polarized partisanship and ideology have become important factors in school tax elections. The "Partisanship Hypothesis" holds that the higher the percentage of conservatives or Republicans in a school district, the less likely it is that the district will approve a tax increase. Thus, Chew's study, which I mentioned in my discussion of the Parenthood Hypothesis, found that self-identified political liberals and moderates were more likely to support school tax increases than were self-identified conservatives, and that "liberal nonparents .. . [were] more likely to support the [tax] increase
than . . .[were] conservative parents (emphasis original) (Chew, 1992, p. 285).
Along these lines, in a study that focused on voter reaction to three different ballot measures, including one that would make it easier to pass school tax increases, Bali found that compared to various demographic predictors, voter ideology had a stronger and more consistent impact on all three issues. He even found that whereas many of his variables lost statistical significance when he reestimated his model by race, the variables related to partisanship and ideology remained statistically significant (Bali, 2008). ${ }^{15}$ Finally, Berkman and Plutzer present evidence that any antipathy senior citizens may have to increased school taxes is a cohort effect related to the consistent political conservatism of the people counted as senior citizens in the relevant studies (Berkman \& Plutzer, 2005, chapter 7).

## Why So Many Answers?

The evidence in support of the theories described above is obviously quite mixed. There are several possible reasons for this. First, as Chew has suggested, research published before about 1980 may be speaking to different social and economic conditions than are present now. In Budgets, Bonds and Ballots, for example, Piele and Hall, summarized a vast number of studies done over the 1960s and early 1970s when the "Baby Boomers" were flooding into the public school system, (see Chew, 1992, p. 282) when the ethos of Lyndon

[^11]Johnson's "Great Society" was developing, and when the economy was expanding at a great rate.

After the publication of Budgets, Bonds and Ballots, things changed dramatically. The Watergate scandal and the conclusion of the war in Vietnam shook the nation's trust in government (Hetherington, 2006). At the same time, the economy faltered and the nation experienced a period of "malaise" under President Jimmy Carter that gave rise to a quarter century of Republican dominance, during which the prevailing ethos was that, as Ronald Reagan claimed, government was the problem. Even Bill Clinton, a Democratic president during those years, observed that the era of big government was over. In general, during that period, Americans wanted lower taxes and less government than they had wanted during the Johnson era. To some extent, that change in mood may be reflected in the studies that came after the 1970s.

A second possibility, suggested by Berkman and Plutzer, is that the research may be infected with a cohort effect. In offering the Gray Peril Revisited Hypothesis, they argue that:

Those born in the 1930s and 1940s grew up in a time when formal education was less important to economic security and in a day when schools claimed only a small amount of tax revenues. Thus older Americans were socialized into a political mindset in which public schooling was just one of many important domestic priorities. . . . At any given time, older Americans are less likely to support spending on schools,
but they did not adopt these views as they aged; rather, they were always like this (Berkman \& Plutzer, 2005, pp. 132-133).

Thus, it could be that studies that took place at different times focused on people who were socialized differently, and who, therefore, reacted differently to different kinds of stimuli.

A third possibility is that most of the research relevant to the questions of interest consisted of studies based on single school districts, cities or states. As Lentz put it:

Many studies center on referenda conducted throughout an entire state. These important studies provide a benchmark statewide explanation of school referenda; however, they are not of much use for referenda planning, as they do not address local problems. Also, many works are case studies conducted in one school district. While these studies are theoretically interesting, they are difficult to generalize. Last, researchers lack agreement as to types of community or jurisdiction. Perhaps this problem is the most thorny (Lentz, 1999, p. 461).

Lentz's point is that much of the work on school tax elections was either steeped in local considerations or that it ignored the impact of local context. In other words, though systematically performed, these case studies might turn on idiosyncratic factors that might not be significant or important for other school districts.

This is essentially the same point made by Gimpel and Schuknecht:

The contextual approach suggests that the geographic clustering of likeminded voters does not just indicate the presence of particular social groups at those locations, but adds something extra to these communities through the instrument of political socialization. Even after accounting for group traits, regional or local effects can frequently be detected because people who are proximate to one another influence each other's attitudes and behavior (Gimpel \& Schuknecht, 2004, p. 3).

Gimpel and Schuknecht's key concern was to explain political diversity within states, and so they focused on geographic clusters of people within state and local boundaries.

But nothing in the argument limits it to regionalism within states. Chinni and Gimpel take the argument one step farther in Our Patchwork Nation:

Although scholars have been studying voting behavior for sixty years now, they have been slow to investigate how being a Republican in Massachusetts may mean something very different from what it means to be a Republican in Arizona. Voters of the same party, but in different places are likely to have very different understandings of what they are doing when they cast a vote for the same candidate. Traditional approaches to studying voting and candidate choice have ignored these nuances for broader, but less helpful, generalizations (Chinni \& Gimpel, 2010, pp. 2-3).

They go on to define 12 county types into which they sorted all American counties to show how the economy, politics and culture can be interpreted differently from the vantage point of each archetypal place.

In a 1999 study of the 892 school tax elections held in Illinois between 1981 and 1989, Lentz attempted to address this problem in the literature. Relying on Lows (Lows, 1992) and Lows and Ho (Lows \& Ho, 1988), Lentz argued that owners of different classes of property are likely to have different values and different ideas about the appropriate way to fund local education. Farmers, for example, may not be "as favorably disposed to tax property for education . . [ [as are] homeowners with children in school" (Lows, 1992). If this were so, according to Lentz, traditional analysis that did not take these differences into account would be suspect. Even if two parcels of real estate are of equal value, different rates of taxation producing different revenue for schools might be applied. "If owners of different classes of property have different values, they might also vote differently in school referenda" (Lentz, 1999, p. 462).

To address this, Lentz proposed a six-category typology of land use to classify all of the districts in her database. ${ }^{16}$ Having divided her cases by typology category, Lentz observed that two property categories had much higher

[^12]rates of referenda passage than did the three others she studied. ${ }^{17}$ Those categories had "relatively homogeneous land uses in the tax base" (Lentz, 1999, p. 464). This led Lentz to suggest that:

Land-use diversity, then, may provide an analogy for population diversity. Communities that share common economic and social experiences are likely to share many values, including attitudes about school taxes. Consequently, districts with homogeneous jurisdictions may pass more referenda than communities that are economically or socially diverse (Lentz, 1999, p. 464).

For present purposes, Lentz made another crucial observation:
If the type of jurisdiction in which a school district is located affects referenda passage, a statewide theory of referenda prediction may be inappropriate. Instead of one explanation, a series of explanations, one for each type of school jurisdiction based on land use, might better explain election outcomes. (Lentz, 1999, p. 464)

To test her theory that jurisdiction type is a predictor of school tax election outcomes, she proposed three hypotheses: (1) Separate equations for each typology category should explain more of the variation in the data than a single statewide equation; (2) There should be variation in the predictive power among and between each of the separate equations; and (3) The values of the predictive variables in each of the separate equations should vary depending on the jurisdiction type. A fourth hypothesis is implied by this work: The correlation

[^13]matrices for each typology type should be different from all of the others and from the correlation matrix for the state as a whole. ${ }^{18}$ I shall refer to these hypotheses as the "Lentz Criteria."

After regressing the percentage of votes in favor of tax increases in each election for each district on variables representing four different explanations for election outcome, Lentz found, first of all, that in every case the equations for the typology categories explained much more of the variation than a single equation for the state did. ${ }^{19}$ Second, she found that her predictors explained between $42 \%$ and $48 \%$ of the variation in the data for small rural, mixed rural residential and older growing jurisdictions, $26 \%$ of the variation in residential suburbs and $30 \%$ of the variation in small cities. Third, she found that "some predictors are more powerful in some jurisdictions than others." These results led Lentz to conclude that her study "dispels the notion that one theory of school finance applies to all districts. Using a local typology provides more predictive power than a statewide analysis and identifies referenda predictors that are more useful in some jurisdictional types than in others" (Lentz, 1999, p. 479).

Though Lentz was studying school tax elections in a single state-Illinois-the logic of her conclusions has important implications for anyone studying

[^14]school tax elections using any kind of database. Without accounting for community type in a way that groups jurisdictions likely to have similar social, political and economic interests, Lentz warns us, reliance on a single equation that applies to all cases without such a grouping is likely to produce unreliable results. I pick up on these observations in the next chapter where I describe what I believe is a better way of understanding school tax elections.

## Conclusion

The mixed perspective that emerges from the literature has made it difficult for scholars to reach any consensus about the factors that distinguish communities that should generally be willing to approve tax increases from those that should not. Despite this, the literature does reveal a pattern that can be used to formulate some theories as to why some districts vote to accept additional burdens for the benefit of their school districts.

First, the literature has been clear that school districts succeed at the polls when they are able to convince a substantial number of voters that that voting for the tax increase is ultimately in their material interest. As empirical support for this proposition, scholars have looked to changes in home values over time and compared price increases in districts that chose to fund their local school systems generously to home prices in school districts where the voters have not been willing to pay more for education (Bradbury et al., 2001). Scholars also point to the actions of districts where there are large numbers of households with parents who presumably are voting to improve the future prospects of their children (or to avoid the costs of private education) by choosing to grant their
school districts the requested tax increases (Chew, 1992; Tedin et al., 2001). Scholars also cite studies of places where there are large numbers of elderly voters who presumably get no immediate benefit from the school district and prefer to pay less in taxes or want public resources devoted to something from which they will receive a direct benefit. (Lambert, Clark, Wilcox, \& Park, 2009b)

Yet, it is also clear that theories that depend on voters who pursue material benefits are only part of the story. School tax elections can sometimes also be explained in terms of voters pursuing solidary and/or purposive benefits related to community engagement, race, partisanship and political ideology; some scholars have insisted that these factors have more to do with whether a tax increase will pass than factors relating to material benefits. Though Berkman and Plutzer have argued that a national commitment to education underpins public school funding decisions, (Berkman \& Plutzer, 2005, pp. 46-47) in the polarized political world in which we now live, it may well be that political ideology is more important than that national commitment.

In the next chapter, I will argue that two social dynamics-partisan polarization and spatial sorting-have greatly magnified the significance of the contextual dynamic described by Lentz. I will also suggest that the contextual foundations of school tax election decisions flow from the intersection of material incentives-wealth—and purposive/solidary incentives—partisanship.

## Chapter 3

## Hypothesis, Data and Analytical Approach

In the preceding chapter, I provided an overview of the Lentz study (Lentz, 1999), which I use as a starting point for my study. While I believe that Lentz was conceptually on the right track in arguing that that understanding school tax elections requires "a series of explanations, one for each type of school jurisdiction" (Lentz, 1999, p. 464), I do not agree that her classification scheme is necessarily the best method for grouping cases, at least at the present time for two basic reasons. First Lentz relied on data unique to Illinois, data not likely to be available for school districts located in other states. Second, for reasons I explain below, I believe that American school districts are better classified, at least for the present time, by dimensions of wealth and partisanship.

Lentz studied the 892 Illinois school tax elections that occurred between 1981 and 1989. Her working assumption was that people who owned the same sort of property would share the same kinds of values and, perhaps more importantly, the impact of a new tax would be the same for most people in the district. A school district where most of the land was classified as agricultural, for example, would have an economy based mostly on farming. Farmers and agricultural workers, she assumed, would share similar economic interests and would look at school tax issues the same way. While she did not assert that farmers and agricultural workers would tend to favor or oppose school tax increases, implicit in her work was the idea that it would be easier for school tax proponents to make a case tailored to a population that largely shared the same economic interests and would feel the brunt of the tax the same way than it would be to make a pitch to an electorate with more
diverse economic interests. In fact, she found that school districts dominated by only a few land use categories, regardless of whether those categories included agricultural, residential or urban land use categories had a better chance of passing tax increases than those jurisdictions with a more diverse mix of land uses (Lentz, 1999).

Though Lentz published her study in 1999, her data was between 10 and 18 years old. Using land use as a proxy for community values might have been a sensible way to categorize districts when Lentz was doing her research and writing, but it assumes that the key dimension of conflict would be economic. Thus, she quotes Lows (Lows, 1992) approvingly:

Obviously, owners of various classes of property may not share the same perceptions about funding for education. For example, an owner of agricultural property whose livelihood is dependent on holdings of land may not be as favorably disposed to tax property for education as is a homeowners (sic) with children in school. In many situations, farmers are often blamed for the defeat of referenda (Lentz, 1999, p. 462)

Similarly, she quotes Lows and Ho (Lows \& Ho, 1988):
As there are different classes of properties, there are different values attaching to owners of those properties. Owners of one class of property may have different values than owners of another class of property. Therefore, equal valuations in two classes of property may not necessarily result in equal revenues for public education because of different values of owners of those properties (emphasis added by author) (Lentz, 1999, p. 462).

The key point of Lentz's analysis, for present purposes, is that if we do not account for the fact that people with similar values and interests may have segregated themselves from others with other values and interests, we cannot get an accurate picture of what moves communities to behave as they do. The effects of some factors may cancel out the effects of others, improperly encouraging school tax proponents from pursuing strategies that may not work in their jurisdictions. Lentz, thus equips us to build powerful analysis tools, provided that we find a good a good method for classifying school districts, and this is likely to be especially true when the sorting criteria pick up the key demographic forces that inform a school district's character.

As a practical matter, it would be difficult or impossible to apply Lentz's classification system to a larger set of cases from states outside of Illinois such as the one I use here. Lentz was primarily concerned with demonstrating that grouping school districts by coherent categories was a better way to begin to understand the factors that influenced school tax elections, and she seemed less concerned about justifying the particular categories she proposed to do the grouping. According to Lentz "the typology evolved through observations that districts with high proportions of agricultural or residential land passed more referenda than districts with a diversified property tax base. The algorithm developed the cut off levels to group similar jurisdictions together" (Lentz, 1999, pp. 463-4). But Lentz was working exclusively with Illinois school districts at a particular point in time, and she appears to have developed her categories with her particular dataset in mind.

This is problematic when attempting to apply the system to cases that come from states other than Illinois and from time periods other than the one she studied because it is not clear that the category "cutoffs" she developed would make any sense today. For
example, Lentz created a "Residential Suburbs" category that included all Illinois school districts that had more than $73 \%$ of its land classified by the Illinois Department of Revenue as Residential Equalized Assessed Value and less than 10\% Agricultural Assessed Value. Leaving aside, for the moment, the fact that the categories depend on determinations made by the Illinois Department of Revenue, Lentz did not argue that her categories were based on theoretical considerations, and there is, therefore, no reason to think that cutoffs like these are still meaningful.

There is also no reason to think that her system of categorization would work across states. Lentz's system worked, for her purposes, because she was studying only Illinois school districts, and so all the land Lentz considered could be assumed to have been classified by Illinois Department of Revenue using a consistent methodology. Classifying real estate for the purposes of taxation, though, depends on political considerations dictated by state and local legislative bodies, taking into account local conditions, sensibilities and political consideration. For a study like this one, reconciling the decisions of the Illinois Department of Revenue with those of other states so that all school districts could be properly and consistently classified is likely to be a difficult and time consuming task fraught with potential error. If one seeks, as I do, to assist local school tax authorities in understanding the factors that will shape their tax elections, a simpler classification method is required.

As a theoretical matter, Lentz's classification system is inappropriate for another reason: The United States is demographically quite different from the way it was in during the time period Lentz studied. By focusing on the economic dimension of conflict, Lentz missed two long-term demographic trends that are both arguably more nuanced and more
salient. First, though perhaps not as clearly observable in 1999 as it is today, Lentz's study failed to address a long-term trend that began to accelerate in the 1990s. As Bishop put it: The migration of people and money throughout the United States in the 1990's created a stark pattern. Some cities were sucking up people and income. Others were flinging them out with what appeared to be centrifugal force. . . . People didn't scatter like ants from a kicked-over hill. There was an order and a flow to the movement-more like a flow of birds (Bishop, 2009, pp. 129-30).

The driving force behind this migration was economic. Some locations such as Portland, Oregon were better able than others to attract the kinds of people that the burgeoning technology and intellectual property oriented businesses wanted to hire (Bishop, 2009; Florida, 2012; Moretti, 2013). Those businesses tended to need highly educated workers, and they were willing to pay those workers handsomely, compared, at least, to workers in places not so fortunate. This created a "virtuous circle" that tended to increase the communal wealth of these places: high tech and intellectual property oriented businesses would attract a corps or highly educated, versatile workers who would attract more such business that would, in turn, attract more workers. (Moretti, 2013)

This "virtuous circle" had a transformative impact on the demographics of the United States. According to Bishop:
. . . by 1980 a decidedly un-American trend began. Places stopped becoming more alike and began to diverge. The economic landscape stopped growing flatter and, in Richard Florida's description, it got spikier. . .The cities that grew the fastest and the richest were the ones where people with college degrees congregated . . . As people
with different levels of education sorted themselves into particular cities, the migration pattern set off segregation by income (Bishop, 2009, p. 131).

As people flood into particular places and flood out of others, the respective housing markets will react. Home prices in places with hot job markets able to attract large groups of new workers should go up, particularly if wages are also going up. On the other hand, prices in housing markets that are having trouble attracting new residents should remain relatively low as demand for land and existing housing declines. This phenomenon, is the force that has made home buying in places like New York City, San Francisco, Washington D.C., Portland, Oregon and their close-in suburbs challenging over the last two decades, and it may have been one of the prime causes of the housing bubble that triggered the Great Recession (See, Adelino, Schoar, \& Severino, 2015; Warren \& Tyagi, 2004).

Because of the highly symbiotic relationship between an area's population growth and its economic growth, Lentz's land use classification system may not work as she expected with current school districts. As Moretti observed:

The economy of a successful city is based on a remarkable equilibrium between labor supply and demand: innovative companies (the labor demand) want to be there because they know they will find workers with the skills they need, and skilled workers (the labor supply) want to be there because they know they will find the jobs they are looking for. The economy of a struggling city is the opposite. Even if real estate is dirt cheap, skilled workers do not want to be there, because they know there are no jobs; innovative companies do not want to be there either, because they know there are no skilled workers. It would be in the interest of one group to move if the other did, but neither wants to go first (Moretti, 2013, p. 188).

Moreover, if Bishop is correct in his observation that the highly educated people who are moving to brain hubs prefer urban and semi-urban areas that de-emphasize the use of personal automobiles to reach work places, recreation areas, shopping areas and entertainment areas, different dynamics than the ones that Lentz assumed were important would be influential in their school tax elections. Contrary to Lentz, the presence of a mix of land uses may therefore mark a community comprised of highly educated, relatively wealthy people who, because of their own life experiences, place a higher value on public education, just as the Educational Attainment Hypothesis expects. Homogenous land uses may be a sign of a faltering economy, and that may trump the importance of shared values as people begin to focus on the affordability of a tax increase in the context of the local economy.

A second trend that Lentz's work misses is that Americans have polarized politically (Abramowitz, 2012; Abramowitz \& Saunders, 1998, 2008; Bishop, 2009; Sussell, 2014), and this political polarization has manifested itself geographically. The mechanism for this, according to Bishop's argument in The Big Sort is simply human nature. As Americans seek and obtain employment in different locations, they move to the communities near their new employers where they feel most politically and socially comfortable.

The extent of this political and geographic polarization, in Bishop's view, has been significant. As of 1976-only 5 years before the first tax election in Lentz's database-less than a quarter of the electorate lived in a county where the outcome of the presidential contest was decided by less than 20 percentage points (Bishop, 2009, p. 6). By some accounts, as of 2012 , more than half of all voters live in counties where the presidential contest was uncompetitive (Edsall, 2013); in 2012, presidential candidates won less than half as many counties by $10 \%$ of the vote or less than they did in 1996, and there is no
reason to think that the trend may have halted, slowed or reversed. In support of this idea, Abramowitz shows that "there were fewer closely contested states and more landslide states in 2008 than in any other nationally competitive presidential election in the past half century" (Abramowitz, 2012).

This is extremely important for present purposes. We can view county-wide presidential voting results as a way of classifying jurisdiction as either Democratic or Republican leaning. That a place tends to favor one party's presidential nominee over that of the other party may, in some places, be an indication of how that jurisdiction views other public policy issues. While classic studies by scholars like Converse and Apter (P. Converse \& Apter, 1964) and Campbell et al (Campbell, Converse, Warren E. Miller, \& Stokes, 1960) found little evidence of constrained ideological thinking during the 1950s and 1960s on the part of the mass public, more recent work notes that party identification and voting are now more tightly linked with attitudes on other issues. Says Alan Abramowitz: To a much greater extent than in the past, disagreements on different types of issues tend to coincide with and reinforce one another-disagreements on economic issues increasingly coincide with disagreements on cultural issues, and disagreements on both economic issues and cultural issues increasingly coincide with disagreements on national security issues. And all of these policy disagreements increasingly coincide with party identification (Abramowitz, 2012, p. 13).

Using ANES data to confirm this point, Abramowitz shows that between 1984 and 2008, the average correlation between responses on 5 survey questions asked in each survey
increased by 16 percentage points (Abramowitz, 2012, p. 13). ${ }^{20}$ What this suggests is that, at least in some jurisdictions, there is a strong chance that partisan attitudes will be reflected in school tax election outcomes even though school tax elections are almost never the subject of overt interparty political conflict.

While I cannot replicate Lentz's complete land use classification scheme, I can at least show that today, failing to take a community's political orientation and levels of affluence into account distorts our understanding of school tax elections there. In Table 3-1, I show the percentage of communities that adopted tax increases in 2011 by Census locale codes similar to the ones Lentz used. In the first column, I present the raw percentage of

Table 3-1 Locale Types for Republican and Democratic Districts

| Locale Type | All Districts | Republican <br> Districts | Democratic <br> Districts | Downscale <br> Districts | Upscale <br> Districts |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Rural | 33.72 | 31.34 | 42.11 | 37.50 | 28.95 |
| Suburban | 44.25 | 32.00 | 53.97 | 38.78 | 48.44 |
| Town | 60.00 | 53.85 | 100.00 | 55.23 | 66.67 |
| Urban | 50.00 | 33.33 | 58.33 | 50.00 | 50.00 |

communities in each code that adopted a higher tax. In the second column, I show the percentage of Republican communities ${ }^{21}$ that adopted tax increases and in the third column, I report the percentage of Democratic communities that adopted tax increases. In the last two columns, I report results by locality type and level of affluence.

Sorting the school districts by locale type and political orientation make a dramatic difference; so does sorting them by locality type and level of affluence. Sixty percent of all

[^15]districts classified as "Towns" and 50\% of all of the districts classified as "Urban" adopted tax increases, while less than 50\% of all "Rural" and "Suburban" districts similarly did so. Looking at the percentages of Republican Districts and Democratic Districts that adopted tax increases, though, discloses that Republican Districts were less willing by far to adopt tax increases than were Democratic Districts. A majority of Democratic districts in three of the four locales were willing to adopt tax increases while a majority of Republican districts were willing to adopt tax increases in only one of the four locale type. And the smallest difference in passage rates between Democratic and Republican locales was more than 10 percentage points. When we consider the districts sorted by locale code and affluence, the results are similar, though perhaps less dramatic.

These considerations have led me to the conclusion that we can do a better job in explaining school tax elections than Lentz did if we use a more parsimonious system of classification based on data readily available for all school districts. More specifically, I shall argue that because Americans have self-segregated themselves on the basis of wealth and partisanship ${ }^{22}$ during and after the time period Lentz studied, we can better understand the general forces that decide school tax elections if we first group school districts by these two dimensions. ${ }^{23}$ Because the various hypotheses I discussed in Chapter 2 are influenced

[^16]by wealth and partisanship, I will show that those hypotheses have different explanatory power depending on where a school district falls on dimensions of wealth and partisanship.

# Preliminary Hypothesis, Data and Method 

## Data and Methods

Assessment of my theory requires the creation of an original database of school tax election data. According to Berkman and Plutuzer, there are over 14,000 school districts in the United States (Berkman \& Plutzer, 2005, p. 1). Of those, Berkman and Plutzer counted over 6,000 school districts that are required to submit all proposed tax increases or tax increases in excess of a specified amount to the voters for approval (See Berkman \& Plutzer, 2005, p. 70 Table 4.2). Without an existing database, identifying and surveying all of these districts to see if they placed a tax increase on the ballot for any given year would be an extraordinarily expensive, impractical and time consuming exercise.

While there is no such comprehensive database that provides this information, I was able to create a database by using information provided by Ballotpedia.org. Ballotpedia.org is a non-profit, non-partisan "online encyclopedia about American politics and elections," whose goal is to "connect people to politics by providing accurate and objective information
make specific appeals that will motivate specific audiences to purchase their products. I encountered several problems with using a highly nuanced scheme as a framework for my research, the most serious of which was that only a few school districts fit in any one category, making statistical analysis impossible. I propose here a parsimonious framework consisting of only a few subgroups, making statistical analysis possible and making it easy for future investigators and school districts to follow up on my research. A second problem with many of these classification systems is that they are proprietary and require the payment of a substantial fee for their use.
about politics at the local, state and federal level." ${ }^{24}$ Ballotpedia's database relies on election data published on official state websites. For 2011, it includes data for school tax elections in the states of Arizona, California, Colorado, Illinois, Michigan, Missouri, Ohio, Oregon, Washington and Wisconsin. In all, there were 232 elections in these states that met the criteria described below for inclusion in my database.

These 10 states are not necessarily a fair cross-section of the American states. Notably missing from this group of states are any cases from the South, New England or the Mid-Atlantic region. In part this stems from the fact that in many school districts from these areas, results are not reported on publicly available databases, school tax decisions are made by elected officials who are accountable to voters for their decisions, or, in the case of some New England school districts, school tax decisions are made at annual town meetings where a large number of municipal governmental issues receive discussion. Accordingly, the results I report in Chapters 4 through 7 may not be easily generalizable to the United States as a whole because they cannot take distinctive regional influences into account (See Gimpel \& Schuknecht, 2004). On the other hand, the database has a robust distribution of cases from places with different degrees of urbanicity, population sizes and densities, levels of affluence, political orientation, ethnicities, age distributions and levels of poverty.

I use cases from 2011 because that was the year in which state governments had begun to cut or reduce state subsidies to local school districts, forcing many school districts either to make deep cuts in programming or to ask the voters, many of whom were cash strapped themselves due to the Great Recession, for more money. Because my research

[^17]questions address adding additional burdens, the database excludes cases where the only question before voters was to continue existing taxes at current rates. ${ }^{25}$ If a jurisdiction held more than one ballot on increasing school taxes during 2011, I have included only the first election because the first election is likely to be a predictor of future voting behavior (see e.g. Lentz, 1999, p. 474). Finally, the database includes an oversample of Ohio cases because state law there makes school finance elections more frequent than in the other states. ${ }^{26}$

Partisan voting statistics are generally not recorded by school district, and, without exit poll data, it is impossible to know or predict whether a voter who participated in a school tax election subscribed to any particular political ideology. In states like Ohio where there are "open primaries," a large number of voters register as independents so as to be able to choose whether to participate in an election as a Democrat or Republican, and in such cases, merely looking at party registration statistics, if available, is an unreliable way to decide whether a district leans Democratic or Republican. For these reasons I use a threepronged strategy to classify districts.

Berkman and Plutzer note that there is a high degree of homogeneity in most school districts (Berkman \& Plutzer, 2005, p. 149). In accordance with Bishop (Bishop, 2009), this homogeneity should extend to political orientation, and so communities that have a

[^18]particular partisan "lean" should tend to elect people who have campaigned for office under the banner of the political party that most closely matches this "lean." Though many localities conduct partisan elections for town or even school district offices, not all do. On the other hand, every state has a legislature where representatives are elected on a partisan basis. Relying on Schaffner and Strebb, who found that in low information downballot contests such as races for the state legislature, voters depend on cues like partisanship "not only to participate but also to participate intelligently in our political system," (Schaffner \& Streb, 2002, p. 589), I looked to the party identification of the person or persons representing the zip code of the school district in the lower house of the state legislature. ${ }^{27}$ In most cases, these zip codes were represented either by a single legislator or a group of legislators from the same party. Where a delegation was either closely divided or equally divided, I attempted to reconstruct the presidential vote that took place in the school district in 2012 using the precinct- by-precinct vote of the same precincts that voted on the school tax question in 2011; if the precincts in 2011 were different from the precincts in 2012, I used the precinct-by-precinct presidential vote in 2008. In cases where presidential election data were unavailable on a precinct-by-precinct basis or where I could not match school district precincts or polling places to presidential election precincts, I used the two-party vote in the county or counties in which the school district in question was located, weighted by the percentage of the vote each county contributed to the school tax election result.

As a measure of wealth, I used the school district's median home value as reported in the Census Bureau's American Community Survey 2006-2010 Summary File (the "ACS")

[^19]adjusted by the Comparable Wage Index ("CWI") developed by researchers to facilitate comparisons of financial and economic data across geographic localities. ${ }^{28}$

In running the general-purpose logistic regression model, the dependent variable is a binary variable for election result with passage labeled " 1 " and defeat labeled "0". I clustered standard errors by state so as to take any statewide random effects into account.

To calculate the change in probabilities in moving from a particular low value for the variable in question to a particular high value for the variable I held all other variables constant at their observed values instead of at their mean values (Hanmer \& Kalkan, 2013). My tables report both the change in probabilities from the lowest value of a variable to its highest value and, to exclude potential outliers, they also report the change in probabilities from one standard deviation below the mean to one standard deviation above the mean.

## Proof of Concept

Table 3-2 confirms that both Home Value and Partisan Orientation are significant and substantial predictors of school tax elections. Moving from the home value that is one standard deviation below the dataset mean to the home value that is one standard deviation above the dataset mean improves the probability that a district will adopt a tax increase by almost $20 \%$. ${ }^{29}$ The change of a district's status from Republican oriented to Democratically oriented improves the likelihood that a district will adopt a tax increase by almost $14 \%$.

[^20]Table 3-2 Logistic Regression of Election Result on Home Value and Partisan Orientation

| Variable | Coefficient <br> (std. err.) | Min-Max <br> Probability | Change in <br> Probability <br> from 1 Std. <br> Dev. Below <br> Mean to 1 <br> Std. Dev. <br> Above Mean | P Value <br> (1-tail) |
| :--- | :---: | :---: | :---: | :---: |
| Home Value | 0.025 <br> $(0.012)$ | 0.5056 | 0.1982 | 0.016 |
| Partisan | 0.595 | 0.1392 | N/A | 0.005 |
| Orientation | $(0.232)$ |  |  | 0.006 |
| Constant | -1.233 |  |  |  |
| N | $(0.415)$ |  |  |  |
| Pseudo R2 | 0.0536 |  |  |  |
| $\mathrm{R}^{2}$ | 0.0717 |  |  |  |

As a more robust, test of my claim, I next provide a model that includes variables for home value and partisanship together with the variables I will use in later chapters to create a general-purpose logistic regression model for testing my theories about what matters in the school tax elections in each group of districts. Based on ACS data, those variables are:
a. To test the Homeowner Hypothesis (school tax increases are sensitive to the percentage of homeowners in the community and the effect a school tax will have on home equity), I provide a variable that is a measure of the percentage of homeowners in a school district ("Homeowners").
b. To test the Racial Diversity Hypothesis (the more racially homogenous the district, the more likely it is to pas a tax increase), I provide a variable that is a measure of the percentage of whites living in a school district ("Whites"). ${ }^{30}$

[^21]c. To test the Gray Peril Hypothesis (large percentages of seniors reduce the likelihood of a tax increase as they seek to avoid costs that benefit others) and Gray Peril Revisited Hypothesis (large percentages of seniors who seek to give back to the community or protect their home investments improve the chances of adopting a tax increase), I provide a variable that is a measure of the percentage of households in the school district that include a person who is at least 60 years of age ("Seniors"). If the model produces significant positive coefficients for the Seniors variable, we may conclude that the Gray Peril Revisited Hypothesis provides at least part of the explanation for tax increases in the quadrant. If the model produces significant negative coefficients for the Seniors variable, we may conclude that the Gray Peril Hypothesis provides at least part of the explanation for tax increases in the quadrant.
d. To test the Parenthood Hypothesis (the greater the percentage of the population with school age children, the greater the likelihood of a tax increase), I provide a variable that measures the percentage of households that have at least one child who is between five and 18 years of age ("Children"). With the relatively small group of cases in each group of districts, this hypothesis cannot be tested in the same model as the Seniors model without creating statistical problems. For each group of districts, therefore, I provide an alternative model in the appendix to each chapter showing the

[^22]results for each group of districts using the Children variable instead of the Seniors variable
e. To test the Community Affinity Hypothesis, I use the log of the total population size ("Total Population (log)"). In accordance with Dahl and Tufte (Dahl \& Tufte, 1973) and Oliver (Oliver, 2001) school district administrators in smaller school districts are likely to be more attuned to the economic sensibilities of the relatively fewer people living in the school district than are officials in larger ones. Larger communities tend to be more culturally and economically heterogeneous than smaller ones (Kaniovski \& Mueller, 2006) and heterogeneity tends to reduces civic engagement (Costa \& Kahn, 2003). From a practical perspective, it should be easier for school district advocates in smaller districts to mobilize voters than it is for school district advocates in larger jurisdictions (Gimpel \& Schuknecht, 2004, p. 370).
f. To test the Educational Attainment Hypothesis (the greater the level of educational attainment in a school district, the more likely it is to adopt a tax increase), I compute a score for each community based on the percentages of its population 25 year old and older who have (i) not graduated from high school; (ii) graduated from high school but not received any additional education; (iii) taken some college courses but have not received a college degree; (iv) earned a college degree. ${ }^{31}$ ("Educational Attainment").

[^23]As Table 3-3 shows, my theory that wealth and partisan orientation are highly important in understanding school tax elections survives even when the two variables of

Table 3- 3 Model Testing Home Value and Partisanship with Controls

| Variable | Coefficient <br> (std. err.) | Min-Max <br> Probability | Change in <br> Probability <br> from 1 Std. <br> Dev. Below <br> Mean to 1 <br> Std. Dev. <br> Above Mean | P Value <br> (1-tail) |
| :--- | :--- | :--- | :--- | :--- |
| Home Value | 0.028 <br> $(0.012)$ | 0.5384 | 0.2161 | 0.008 |
| Partisan <br> Orientation | 0.681 <br> $(0.29)$ | 0.1528 | $\mathrm{~N} / \mathrm{A}$ | 0.009 |
| Homeowners | -2.098 <br> $(1.29)$ | 0.2552 | -0.1025 | 0.052 |
| Whites | -0.506 <br> $(0.525)$ | 0.084 | -0.0317 | 0.168 |
| Seniors | 0.861 <br> $(2.53)$ | 0.069 | 0.074 | 0.367 |
| Children ${ }^{32}$ | -2.864 <br> $(1.767)$ | -0.248 | -0.08 | 0.053 |
| Population Size | -0.372 <br> $(0.138)$ | 0.493 | 0.1934 | 0.004 |
| Constant | 4.047 <br> $(1.702)$ |  |  | 0.008 |
| N | 232 |  |  |  |
| Pseudo R2 | 0.0834 |  |  |  |
| $\mathrm{R}^{2}$ | 0.1089 |  |  |  |

interest are placed in a model that controls for most of the key hypotheses discussed in Chapter $2 .{ }^{33}$
for each group and then regressed election outcome on them. The variable in the model is the predicted probability of a vote in favor of a tax increase as computed by STATA.
${ }^{32}$ From alternative specification. See Appendix Table 3B-1
${ }^{33}$ The model specified in Table 3-3 does not include a variable for educational attainment because for this dataset, the correlation between educational attainment and home value was over $73 \%$, and it would cause multicollinearity problems wit the model.

Tables 3-2 and 3-3 provide the evidence required to support my claim that it is analytically reasonable and useful to divide all of the cases in the dataset into groups defined by wealth and partisan orientation. Finally, Table 3-4 provides evidence that moving Table 3-4 Probability of Adopting a Tax Increase With All Control and District Groups Included

| Variable | Coefficient <br> (std. err.) | Min-Max <br> Probability | Change in <br> Probability <br> from 1 Std. <br> Dev. Below <br> Mean to 1 <br> Std. Dev. <br> Above Mean | P Value <br> (1-tail) |
| :--- | :---: | :---: | :---: | :---: |
| Educational <br> Attainment | 8.095 <br> $(1.499)$ | 0.762 | 0.178 | 0.000 |
| Homeowners | -1.293 <br> $(1.336)$ | -0.148 | 0.059 | 0.167 |
| Whites | 0.078 <br> $(0.646)$ | 0.012 | -0.004 | 0.452 |
| Seniors | -0.574 | -0.043 | 0.047 | 0.421 |
| Children | -1.127 <br> $(1.1822)$ | -0.095 | 0.057 | 0.268 |
| Population Size | -0.651 | -0.702 | 0.299 | 0.0005 |
| Googleplex | $-0.202)$ | -0.927 | -0.165 | $\mathrm{~N} / \mathrm{A}$ |
| Smallville | $-0.462)$ | -0.716 | -0.142 | $\mathrm{~N} / \mathrm{A}$ |
| Goldwater | -1.873 | -0.330 | $\mathrm{~N} / \mathrm{A}$ | 0.023 |
| Country | $(0.475)$ |  |  | 0.000 |
| Constant | 4.473 |  |  | 0.038 |
| N | $(2.512)$ |  |  |  |
| Pseudo R 2 | $0.206)$ |  |  |  |
|  | 0.1299 |  |  |  |

from one group of districts to another group of districts significantly and substantially affects the probability of passing school tax increases taking all other factors into account. ${ }^{34}$

34 In Table 3-4, the comparison group is the Clintonland group of districts, and so the results
displayed must be understood as the difference in the probability of passing a tax increase displayed must be understood as the difference in the probability of passing a tax increase

Table 3-5 summarizes the results of grouping the districts by wealth and political orientation. According to the Table 3-5, without controlling for any of the factors

Table 3- 5 Summary of School Districts by Quadrant

|  | Partisan Orientation |  |
| :---: | :---: | :---: |
|  | Democratic | Republican |
| Above Median Home <br> Value | $\quad$Quadrant 1 <br> The Googleplex <br> $\quad$ districts$\mathrm{N}=54$Voting Yes 31(57.41\%)Voting No 23(42.59\%) |  |
| Below Median Home <br> Value | $\quad$$\quad$ Quadrant 2 <br> The Clintonland <br> $\quad$ districts$\mathrm{N}=42$Voting Yes 20(47.62\%)Voting No 22(52.38\%) | Quadrant 3 <br> The Smallville districts $\mathrm{N}=74$ <br> Voting Yes 27 (36.49\%) <br> Voting No 47 (63.51\%) |

between the Clintonland group and each group displayed in the table, controlling for all other factors. Separate tests of each group against each other group continue to show significant differences in all cases except that there is no difference in the overall probability of passage in moving from the Googleplex group to the Smallville group once all other factors are taken into account.
hypothesized to influence the outcome of school tax elections in Chapter 2, the chances of passing a tax increase were much better in the affluent, Democratically leaning Googleplex districts than anywhere else. ${ }^{35}$

The Googleplex group was the only one of the four groups of districts in which a majority of the districts adopted tax increases, and it passed them at a substantially higher rate than did their less affluent co-partisans in the Clintonland districts. Downscale Republican Smallville districts passed tax increases at a lower rate than either of the Democratically oriented districts, but at a higher rate than did their more affluent copartisans in the Goldwater Country districts. Table 3-5 confirms that school authorities in different types of districts are likely to face different challenges in getting their tax measures passed. Advice appropriate for school tax authorities in one quadrant is therefore probably not appropriate in any other.

## Between Group Differences

Before turning to within group differences between Adopter districts and Rejecter districts in Chapters 4 through 7, I highlight the similarities and differences between the districts that fall within the various dimensions of the typology depicted in Table 3-5 and the ways each cell of the typology compares to the other cells in the typology. This will facilitate comparisons of group characteristics both with the dataset as a whole and with the partisan and economic groups of which each cell in the typology is a part. Republican oriented school districts are quite different from their Democratic counterparts and districts with above median home values are quite different from districts with home values below the

[^24]median. It is therefore not surprising that in trying to learn how school districts decide to adopt or reject proposed tax increases, we need to look at different kinds of districts with different expectations.

## Republican Districts vs. Democratic Districts

Table 3-6 reports the results of significance tests of differences between the means
Table 3- 6 Comparison of Democratic and Republican Means for Selected Demographic Characteristics

| Characteristic | Republican Mean | Democrat Mean | Difference |
| :--- | :--- | :--- | :--- |
| Home Value | $\$ 200,630$ | $\$ 294,067$ | $-\$ 93,437^{* * *}$ |
| Income | $\$ 61,249$ | $\$ 61,414$ | $\$ 165$ |
| Education | 0.4056 | 0.4830 | $-.0774^{* * *}$ |
| Home Owners | 0.7802 | 0.7104 | $0.0697^{* * *}$ |
| Whites | 0.9258 | 0.8014 | $0.1243^{* * *}$ |
| Seniors | 0.3384 | 0.3399 | 0.0014 |
| Children | 0.3381 | 0.3266 | $0.0114^{*}$ |
| Poverty | 0.1042 | 0.1030 | 0.0012 |
| Total Population | 22768 | 51058 | $-28290^{* * *}$ |
| Pop. Density | 472 | 2019 | $-1547^{* * *}$ |
| District Ranking | 0.609 | 0.562 | $0.046^{* * *}$ |
| Private School | 0.1498 | 0.1763 | $-0.0265^{* *}$ |
| College Grads | 0.2361 | 0.3209 | $-0.0847^{* * *}$ |
| Vacant Housing | 0.1192 | 0.911 | $0.208^{* *}$ |
| Owner Tenure | 12.96 | 13.61 | $-0.6413^{*}$ |
| Median Age | 39.81 | 39.71 | 0.1 |
| Per Pupil Spend | $\$ 10.436$ | $\$ 10.668$ | $-\$ 0.2317$ |
| Minority <br> Enrollment | 0.1306 | 0.2936 | $0.163^{* * *}$ |
| Total Enrollment | 3668 | 6499 | $2831^{* * *}$ |
| Tax Approval Rate | 0.3382 | 0.5312 | $-0.193^{* * *}$ |
| N | 136 | 96 |  |
| *p<0.05, ** p<0.01, | *** p<0.005 (one-tailed) |  |  |

for a number of demographic factors in Republican and Democratic districts. Whereas
Republican districts approved only $33.82 \%$ of the school tax increases proposed in 2011,
Democratic districts approved $53.12 \%$ of the school tax increases proposed in 2011, a 19.3
percentage point difference. All else being equal, a district's political orientation made a huge difference in the likelihood that it would approve a tax increase in 2011.

What Table 3-6 suggests is that this difference in the passage rate may stem from ways that Republican school districts differ from Democratic school districts. First of all, the home values in the database's Republican school districts are over \$93,000 lower, on average, than they are in the Democratic school districts. This probably stems, in part, from the relatively higher mean level of overall educational attainment and the higher mean percentage of adults holding college degrees in the Democratic districts. Taking home value as an indicator of wealth, it is not surprising that parents in the Democratic districts are somewhat better able to send their children to private school than parents in the Republican districts. Home ownership is somewhat more prevalent in the Republican districts, and so this is consistent with an inverse relationship between home ownership and a willingness to pay additional school taxes that has been cited by previous scholarship.

One of the key demographic differences between the two district types is the relationship between home value, total population size, population density and housing unit density. In Figure 3-1, I plot the linear predictions of the relationship between mean median home value and total population size for both kinds of districts. In general, higher home values are linked to places with higher population sizes for both Democratic and Republican communities, ${ }^{36}$ but on average, Republican districts have significantly fewer

[^25]people than do their Democratic counterparts. Despite this, as Figure 3-2 discloses, Republicans apparently tend to value places with lower population densities and open space

Figure 3-1 Place Size Preferences by Political Orientation and Adjusted Median Home Value

more than do Democrats, and so as their home values go up they seek to locate those homes in places where neighbors are relatively scarce. Democrats appear to want to live in more densely developed areas as their home values increase. While it cannot be determined from my current data, it seems intuitive that these preferences could play an important role in explaining why it seems easier to pass school tax questions in Democratic

Figure 3-2 Population Density Preferences by Political Orientation and Adjusted Median Home Value

districts than in Republican districts: It simply requires less time and effort for school tax proponents to get their messages disseminated and to get people to the polls when people are packed more closely together than when they are spread out (Gimpel \& Schuknecht, 2004, pp. 369-70).

Another key distinction between Democratic districts and Republican districts is racial diversity. On average, all of the districts of both political orientations are overwhelmingly white, but Republican districts have significantly more whites than Democratic districts have, and they also have lower percentages, on average, of minority students enrolled in their schools. As previously noted, Democratic school districts passed tax increase at a higher
rate than did the Republican school districts, and this is not what the Racial Diversity Hypothesis might lead us to expect. In most of the studies cited in Chapter 2 on this point, higher racial diversity works against school tax approval, especially when the degree of diversity in the school population does not match the degree of diversity in the underlying school district. It could be that racial diversity simply means something different in Republican districts than it does in Democratic ones. Democrats may have a greater tolerance for diversity than do Republicans.

The two types of districts do not differ significantly on other important characteristics. Both district types have approximately equal mean percentages of households with people 60 years and older and approximately equal mean percentages of households with children under the age of $18 .{ }^{37}$ The median age for both types of communities is between 39 and 40 years old. Poverty is not significantly more problematic in one district type than in the other, and so from that standpoint, it is not likely that capacity to pay any new tax is any greater in the Democratic districts than in the Republican districts. Neither district type spends materially more on its students, on a per pupil basis, than does the other, though the students in the Democratic districts, as a group score about 5 points lower than students in the Republican districts on standardized tests.

## Above Median Home Value Districts vs. Below Median Home Value Districts

Table 3-7 reports the results of significance tests of differences between means of a number of demographic factors for above median home value districts and below median home value districts. Although districts in the above median home value group passed a

[^26]greater percentage of tax increases than the districts in the below median group, the difference between the two is quite modest and not statistically significant compared to the difference between Republican and Democratic districts described above; most of the

Table 3-7 Comparisan of Selected Demographic Characteristics for Below Median and Above Median Districts

| Characteristic | Below Median <br> Mean | Above Median <br> Mean | Difference |
| :--- | :--- | :--- | :--- |
| Home Value | $\$ 136,225$ | $\$ 342,362$ | $-\$ 206,137^{* * *}$ |
| Income | $\$ 51,172$ | $\$ 71463$ | $-\$ 20,290^{* * *}$ |
| Education | 0.352 | 0.524 | $-0.172^{* * *}$ |
| Political <br> Orientation | 0.362 | 0.465 | $-0.103^{*}$ |
| Home Owners | 0.75 | 0.75 | 0.00 |
| Whites | 0.894 | 0.855 | $0.039^{* *}$ |
| Seniors | 0.348 | 0.33 | $0.018^{* *}$ |
| Children | 0.324 | 0.343 | $-0.019^{* *}$ |
| Poverty | 0.131 | 0.076 | $0.055^{* * *}$ |
| Total Population | 25,406 | 43,543 | $-18,137$ |
| Pop. Density | 956 | 1269 | $-313^{*}$ |
| District Rank | 0.567 | 0.614 | $-0.049^{* * *}$ |
| Private School | 0.148 | 0.173 | $0.025^{* *}$ |
| College Grads | 0.177 | 0.104 | $-0.189^{* * *}$ |
| Vacant Housing | 0.111 | 11.991 | 0.007 |
| Owner Tenure | 14.474 | 40.048 | $2.483^{* * *}$ |
| Median Age | 39.485 | $\$ 10.31$ | -0.563 |
| Per Pupil Spend | $\$ 10.755$ | 0.243 | $\$ 0.444$ |
| Minority <br> Enrollment | 0.153 | $-0.09^{* * *}$ |  |
| Total Enrollment | 3407 | 6272 | $-2865^{* * *}$ |
| Tax Approval Rate | 0.405 | 0.431 | -0.026 |
| N | 116 | 116 |  |
| * p<0.05, ** p<0.01, *** p<0.005 (one-tail) |  |  |  |

difference is attributable to the relatively large percentage of school districts that adopted tax increases in the Googleplex group. Neither group of districts adopted a majority of the tax increases it was asked to consider.

Almost by definition, we should expect to find significant economic differences between above median home value districts and below median home value districts. As was true in the comparison between Republican and Democratic districts, differences in mean educational attainment, median home values, and percentages of college graduates are substantial and highly significant. There are also substantial and significant differences in income between above median home value districts and below median home value districts. Above median districts also have about half as much poverty as do below median districts. As can also be expected, the schools in the above median districts rank about three percentage points higher than those In the below median districts, lending some support to Warren \& Tyagi's notion that one of the key reasons that home prices are so high in areas where people have a lot of income and education is that people are using their wealth to buy into areas where the schools are better (Warren \& Tyagi, 2004).

Districts with home values above the median also differ socially and demographically from districts with home values below the median. There are about 2\% more households with members who are at least 60 years old in the below median districts, a difference which is significant and could be pivotal given the low voter turnout typical of school tax elections. By contrast, there are about $2 \%$ more households with children in the above median districts, which might make it easier to pass tax increases in this wealthier group. Below median districts have significantly more white residents. This probably goes a long way in explaining why below median districts have a smaller percentage of minority students enrolled in their public schools.

As Figure 3-3 demonstrates, race works very differently in above median home value districts than in below median home value districts. For the above median home value group,

Figure 3-3 Private School Enrollment and Minority Public School Enrollment

as minority enrollment in the public schools increases, the percentage of children who attend private school declines; for the below median school district group, just the opposite occurs. What the linear prediction line for the below median group implies about racial tolerance in these districts is clear. For the above median group, the negatively sloping linear prediction line is consistent with the high levels of tolerance that Moretti, Florida and Bishop say is inherent in richer communities built on knowledge-based economies.

One key difference between above median and below median districts is the length of time people spend living in the same house. In below median districts, people have lived in the same home, on average, about 2.5 years longer than people living in above median districts. When coupled with the fact that people in the below median districts are, on average, somewhat poorer and less well educated than people in the above median districts,
the data suggest that people in the below median districts are less able to leave their neighborhoods. On the other hand, people who live in the same place for an extended period of time may do so voluntarily because they feel an attachment to their communities that makes them willing to bear additional burdens for their neighbors. (Wong, 2010)

Another key difference between above median and below median districts is the size of the community. The communities in the above median group are, on average more than $71 \%$ bigger in terms of total population and have about $33 \%$ greater population density. Above median districts also handle about $84 \%$ more students, on average, than the below median districts do.

Above median districts do not differ from below median districts on several other factors. There are about as many homeowners in both types of districts, and the housing unit vacancy rates are about the same. Though the above median districts have somewhat better schools than the below median districts have, both district types spend about the same amount of money on a per pupil basis. The median age for the above median and below median groups is about the same.

## The Googleplex Districts

Partisan orientation and home value combine to produce distinctive groups of school districts. Table 3-8 provides a statistical profile of the Googleplex districts. The Googleplex districts are, on average, the most affluent. As compared to the other districts, they have, on average, adjusted median home values that are more than twice as high as the mean for the other three quadrants and $\$ 135,886$ higher than the mean adjusted median home value for the Goldwater Country group, which is the quadrant with the next highest adjusted median home values. Median income levels in the quadrant are over \$70,000, which is
more than $\$ 11,000$ higher than the mean for the other three quadrants. It is therefore not surprising that the Googleplex districts can be distinguished from the others on the basis of its poverty mean, which is lower than the poverty mean for the two below median home

Table 3-8 Selected Demographic Characteristics of Googleplex Districts

| Variable | Googleplex <br> Districts | Other 3 Quadrants | Difference |
| :--- | :---: | :---: | :---: |
| Home Value | $\$ 414,991$ | $\$ 185,992$ | $\$ 228,999^{* * *}$ |
| Income | 0.567 | $\$ 58,629$ | $\$ 11,551^{* * *}$ |
| Education | 0.703 | 0.398 | $0.169^{* * *}$ |
| Owners | 0.777 | 0.766 | $-0.064^{* * *}$ |
| Whites | 0341 | 0.904 | $-0.127^{* * *}$ |
| Seniors | 0.335 | 0.338 | 0.003 |
| Children | 0.079 | 0.333 | 0.002 |
| Poverty | 56,420 | 27,817 | $-0.032^{* * *}$ |
| Total Population | 2142 | 800 | $28,603^{* * *}$ |
| Population <br> Density | 0.604 | .584 | $3142^{* * *}$ |
| District Rank | 0.186 | 0.153 | -0.019 |
| Private School | 0.41 | 0.229 | $0.033^{* *}$ |
| College Grads | 0.086 | 0.114 | $0.181^{* * *}$ |
| Vacant Housing | 12.81 | 13.36 | $0.028^{*}$ |
| Owner Tenure | 40.13 | 39.66 | -.545 |
| Median Age | $\$ 10,00$ | $\$ 10.69$ | 0.47 |
| Per Pupil <br> Spending | 0.34 | 0.155 | $-\$ 0.69$ |
| Minority <br> Enrollment | 7211 | 4119 | $0.185^{* * *}$ |
| Total Enrollment | $57.41 \%$ | $37.08 \%$ | $3092^{* *}$ |
| Approval Rate | 54 | 178 | $20.33 \% 0^{* * *}$ |
| N |  | 124 |  |
| *p<.05, **p<.01, ${ }^{* * *} \mathrm{p}<.005$ (one-tail) |  |  |  |

value groups and about equal to the poverty mean for the Goldwater Country districts. The general level of educational attainment and the percentage of college graduates, both of which are higher than the mean for the remaining districts together and for the mean for the Goldwater Country districts, no doubt contribute to the affluence of this group of districts.

While being the most affluent and best educated, the districts in this quadrant are also the most racially and economically diverse. The Googleplex districts are distinctive for their relatively low percentages of whites. The mean Googleplex school district has a minority school population of over $33 \%$, more than twice what the mean is for the other three quadrants, and more than eight percentage points higher than in the Clintonland group of

Figure 3-4 Private School and Minority Public School Enrollment for Googleplex Districts

Private School and Minority Public School Enrollment In Quadrant 1

districts, which had the second highest percentage of minority students. If we take the share of students who attend private school as crude evidence of tolerance, we see, in Figure 3-4, that in the Googleplex group of districts, increased diversity in the classroom implies lower private school enrollment.

Finally, the school districts in the Googleplex group are characterized by large populations and high population densities. The average school district in the Googleplex
group is home to more than 56,000 residents. That is almost twice the mean for the remaining quadrants and more than 20,000 people more than in the Clintonland group, which is the next most populous quadrant. Population density in the Googleplex districts is over 1,300 people per square mile greater than the mean for the other three quadrants and about 275 people per square mile higher than the average for the districts in the Clintonland group of districts, which has the second highest average population density. Figure 3-5

Figure 3- 5 Distribution of School Districts by Quadrant and Location Type

shows how the various school districts are distributed among rural locations, small town locations, suburban locations and urban locations. ${ }^{38}$

[^27]All of these characteristics are hallmarks of what Moretti describes as "brain hubs" (Moretti, 2013). As I will discuss in greater detail in Chapter 4, brain hubs dominate the Googleplex quadrant. For Moretti, brain hubs are relatively large population centers that focus generally on creative, high-tech and financial, insurance, and real estate ("FIRE") industries. Brain hubs tend to be large and highly diverse. They have to be fairly large because they require a large number of employers to attract the highly educated talent that creative, high-tech and FIRE industries require. Well-educated workers want to be in markets where there is an abundance of jobs should they need to change, and these kinds of businesses want to be in labor markets that are most likely to be able to provide the talent the businesses need to be successful (Moretti, 2013, pp. 126-127).

High levels of diversity prevail in these kinds of communities because the high levels of talent brain hub employers need is not confined to whites born in the United States. ${ }^{39}$ Employers who need well-educated talent discovered long ago that no race or ethnicity had a monopoly on the intellectual capabilities their businesses needed to remain on the cutting edge; these kinds of businesses have proven that they will hire people who possess those capabilities and pay them generously for it regardless of ethnicity and/or nationality.

When people with high levels of education take jobs, they move to communities where they feel comfortable. Florida notes that:

Tolerance—or, broadly speaking, openness to diversity—provides an additional source of economic advantage that works alongside technology and talent. The places that are most open to new ideas and that attract talented and creative people

[^28]from across the globe broaden both their technology and talent capabilities, gaining a substantial economic advantage (Florida, 2012, pp. 232-33).

High levels of racial and ethnic tolerance tend to lead to highly diverse communities like the ones in the Googleplex group.

For present purposes, though, in addition to proximity to good, high paying jobs, people in these fields probably demand good schools (Cohen, 2000; Weiss, 2004). After all, more than almost anyone else, workers in the kinds of industries located in these brain hubs have benefited from their educations and know its value. That is probably why school districts in the Googleplex group passed a greater percentage of school tax increases than did any of the other groups of districts.

## The Clintonland Districts

Table 3-9 provides a statistical profile of the Clintonland district group. About the only thing that the districts in the Clintonland group hold in common with the Googleplex districts is political orientation. Otherwise, they are, on average, substantially worse off economically, than the districts in the Googleplex group. Median home values in this quadrant, are, on average, over $\$ 276,000$ lower than they are in the other Democratic quadrant; even if the Googleplex group home values are excluded from the calculation, Clintonland median home values are, on average still over $\$ 155,474$ lower than the average median home value in the Republican oriented quadrants, making them the lowest in the typology. ${ }^{40}$ Median income for the districts in this quadrant is also well below the mean for the Goldwater Country districts but not much different than the mean for the Smallville districts. Clintonland districts,

[^29]on average, have the second largest percentage of people living at or below the poverty level, though Clintonland districts cannot be distinguished statistically from the Smallville

Table 3-9 Selected Demographic Characteristics of the Clintonland Districts

| Variable | Clintonland | Other 3 Quadrants | Difference |
| :---: | :---: | :---: | :---: |
| Home Value | \$138,593 | \$261,554 | -\$122,961*** |
| Income | \$50,145 | \$63,788 | -\$13,643*** |
| Education | 0.375 | 0.451 | -0.076*** |
| Owners | 0.72 | 0.758 | -0.38* |
| Whites | 0.833 | 0.883 | -0.05* |
| Seniors | 0.338 | 0.339 | -0.001 |
| Kids | 0.316 | 0.337 | -0.021* |
| Poverty | 0.133 | 0.097 | -0.036 |
| Total Population | 44,165 | 32,332 | 11,833 |
| Population Density | 1862 | 947 | 915*** |
| District Rank | 0.545 | 0.601 | -0.056*** |
| Private School | 0.164 | 0.160 | 0.004 |
| College Grads | 0.206 | 0.286 | -0.08*** |
| Vacant Housing | 0.098 | 0.110 | 0.012 |
| Owner Tenure | 14.64 | 12.92 | 1.72*** |
| Median Age | 39.16 | 39.90 | 0.74 |
| Per Pupil Spending | \$11.53 | \$10.31 | \$1.21* |
| Minority Enrollment | 0.234 | 0.19 | 0.44 |
| Total Enrollment | 5582 | 4675 | 907 |
| Approval Rate | 47.62\% | 40.52\% | 7.1\% |
| N | 42 | 190 |  |
| ${ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01,{ }^{* * *} \mathrm{p}<.001$ (one-tailed) |  |  |  |

districts on this variable.
The reason that the means for the economic variables in this quadrant are lower than they are for the above median home value districts probably comes down to education.

The general level of education and the percentage of college graduates are both much lower than the mean for the remaining three districts together, though higher than the mean for the Smallville group.

Socially and demographically, the districts in the Clintonland group are only somewhat different from the districts in the other three quadrants. The difference in the mean percentage of white residents in the Clintonland group of districts and the mean of the other three districts collectively reaches statistical significance. ${ }^{41}$ It is about 4.9 percentage points higher than the mean for the Googleplex districts, a statistically significant difference, ${ }^{42}$ and could be substantial in a close, low turnout election. On the other hand, the mean percentage of white residents in the Clintonland districts is more than 9 percentage points lower than in the Smallville group ${ }^{43}$ of districts and 6 percentage points lower than in the Goldwater Country group, with both differences statistically significant. ${ }^{44}$

The Clintonland school districts have the second highest percentage of minority student enrolled in their schools. The percentage of minority students who attend school in the Clintonland districts is not statistically different from that of the other three districts considered together, but the lack of significance is largely due to the relatively high percentage of minority students in the Googleplex group. Compared to the mean percentage of minority students enrolled in districts in the Smallville group of districts and the Goldwater Country districts individually, the difference between minority enrollment is statistically significant in the Clintonland/Smallville comparison, ${ }^{45}$ but not in the Clintonland/Goldwater Country comparison. ${ }^{46}$

Figure 3-6 suggests that the percentage of minority students in the Clintonland school districts may be a problem in terms of passing tax increases. Unlike Figure 3-5, the slope of

[^30]the linear prediction line representing the school districts in the Clintonland districts is positive. The implication is that the decision to send one's children to private school for parents living in the Clintonland group of school districts is extremely sensitive to classroom

Figure 3-6 Private School and Minority Public School Enrollment for Clintonland Districts

diversity and that, at least within the quadrant, a district's willingness to adopt a tax increase may be influenced by racial considerations.

Clintonland schools have, on average, fewer households with children ${ }^{47}$ than the other three quadrants. There is no statistical difference between the percentage of households with members at least 60 years of age in the Clintonland group and that of the other groups in the typology taken together.
${ }^{47} \mathrm{p}=0.01$ (one-tailed)

What ultimately distinguishes the Clintonland districts from all of the others is its mix of locality types. As Figure 3-5 shows, like the Googleplex group, the Clintonland group has a large percentage of districts that can be classified as suburban and as rural, but the Googleplex group has more suburban districts than does the Clintonland group. The Clintonland group has more rural and urban districts than the Googleplex group of districts. Likewise, the Clintonland group has a much higher percentage of suburban school districts than the Smallville and Goldwater Country districts, which are, in turn far more rural in character. Given these differences in location type, it is not surprising that, even though the total population sizes for the Clintonland districts are, on average, statistically about equal to the mean population size for all of the remaining districts, its mean population density is much greater, and as previously discussed, added density may be an advantage in passing school tax increases.

Given the mix of characteristics described above, it is appropriate to regard these school districts as lower middle class or working class areas. Median home values and incomes in this quadrant are too high for the districts to be regarded as impoverished or underprivileged, but the general level of education and the mean percentage of college graduates are too low for these districts to be considered brain hubs akin to those in the Googleplex group. Because the level of educational attainment is relatively low, it is likely that the people who live in these school districts have semi-professional, pink collar, blue collar or clerical jobs. ${ }^{48}$ Lower level jobs generating lower levels of income mean that tax increases may not be as affordable in these types of districts than as in others. Finally,

[^31]these districts probably do not feature the level of racial and ethnic tolerance typically required in a brain hub, and so if people in these districts have not been able to arrest racial animus, the levels of diversity present in these districts could make it harder for these communities to pass tax increases, especially if there is a perception that members of a racial outgroup will be the prime beneficiaries of taxes paid by the white majority.

## The Smallville Districts

Table 3-10 provides a statistical profile of the below median Republican school district group. The characteristics that most distinguish the districts in the Smallville group from the others are locality type, population size, population density and racial homogeneity. As Figure 3-5 discloses, the Smallville group has the largest percentage of rural districts and the smallest percentage of suburban and urban districts in the dataset. These districts also have the smallest mean populations and the lowest population densities in the dataset. This is probably why the average school district in this quadrant has about 3,900 fewer students than the average school district in the rest of the dataset. The average percentage of whites living in the Smallville districts exceeds $92 \%$, which is well above the mean level of whites in either of the Democratic quadrants, but about equal to the average level of whites living in the Goldwater Country districts.

From an economic standpoint the Smallville school districts are more like the school districts in the Clintonland group than they are like their more affluent Republican counterparts in Goldwater Country. While the Smallville school districts can be distinguished from the dataset as a whole on the basis of median home value, median income and poverty, they cannot be distinguished from the Clintonland schools on these characteristics. Economic factors may be one reason that, compared to the dataset as a
whole, the Smallville school districts have the smallest share of students attending private school.

Table 3-10 Selected Demographic Characteristics of Smallville Districts

| Variable | Smallville | Other 3 Quadrants | Difference |
| :---: | :---: | :---: | :---: |
| Home Value | \$134,880 | \$288,196 | -\$143,315*** |
| Income | \$51,756 | \$65,796 | \$14,040*** |
| Education | 0.338 | 0.484 | -0.146*** |
| Owners | 0.766 | 0.744 | 0.022* |
| Whites | 0.928 | 0.849 | 0.079*** |
| Seniors | 0.354 | 0.332 | 0.022*** |
| Kids | 0.329 | 0.0336 | -0.007 |
| Poverty | 0.13 | 0.091 | 0.039*** |
| Total Population | 14,759 | 43,708 | 28,949*** |
| Population Density | 442 | 1427 | -985*** |
| District Rank | 0.58 | 0.594 | -0.014 |
| Private School | 0.139 | 0.170 | -0.031*** |
| College Grads | 0.16 | 0.323 | $0.163^{* * *}$ |
| Vacant Housing | 0.118 | 0.102 | 0.016 |
| Owner Tenure | 14.378 | 12.696 | 1.682*** |
| Median Age | 39.67 | 39.81 | 0.14 |
| Per Pupil Spending | \$10.31 | \$10.63 | -\$0.32 |
| Minority Enrollment | 0.107 | 0.241 | $0.134^{* * *}$ |
| Total Enrollment | 2,172 | 6088 | 3,915*** |
| Approval Rate | 36.49\% | 44.3\% | 7.81\% |
| N | 74 | 158 |  |
| ${ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01,{ }^{* * *} \mathrm{p}<.005$ (one-tailed) |  |  |  |

The only other factors that distinguish the Smallville school districts are the median tenure of their residents in the same home and the percentage of households with residents who are at least 60 years old. The average median tenure for the Smallville districts is more than a year and a half longer than the mean for the other three quadrants, though not different statistically from the mean median tenure for the Clintonland group. Finally, its population of households with members who are at least 60 years old exceeds the other
three district groups taken together by about 2 percentage points, but once the Googleplex group is excluded, the Smallville group exceeds the Clintonland and Goldwater Country districts together on this measure by more than 2.6 percentage points ${ }^{49}$; it has only a slightly higher percentage of households with seniors than does the Clintonland group. ${ }^{50}$

From the characteristics just presented, there is a distinctly small town, rural feel to these districts. Though there is a significant amount of variation, low population density signals agricultural land use and wide open spaces. This is consistent with Figure 3-5. Given the economic indicators, the fact that the median percentage of college graduates is relatively small and the quadrant's level of educational attainment is relatively low, as we shall see in Chapter 6, it is likely that there are not many people coming or going from these districts. Unlike their Democratic counterparts, these districts apparently have very little that is attractive to minorities. When Sarah Palin spoke about the "real America" during the 2008 presidential campaign (Eilperin, 2008), she probably had places like these in mind.

## The Goldwater Country Districts

Table 3-11 provides a statistical profile of the Goldwater Country school district group. Like the districts in the Googleplex group, the districts in this quadrant are quite affluent. Home values and median income are well in excess of the respective means for the rest of the dataset and the percentage of people in the typical Goldwater Country district living at or below the poverty level is well below the percentage living at or below the poverty level in the other three quadrants. Average median income and poverty levels in the Goldwater Country districts, though, are not significantly different from the means for those variables in the Googleplex districts. This probably stems from the generally high level of education and

[^32]large percentage of college graduates who live in Goldwater Country districts. Because these districts lean Republican, in accordance with Figure 3-2, we should expect these

Table 3-11 Selected Demographic Characteristics of Goldwater Country Districts

| Variable | Goldwater Country | Other 3 Quadrants | Difference |
| :--- | :---: | :---: | :---: |
| Home Value | $\$ 279,105$ | $\$ 224,774$ | $\$ 54,331^{* * *}$ |
| Income | $\$ 72,580$ | $\$ 57,210$ | $\$ 15,370^{* * *}$ |
| Education | 0.486 | 0.42 | $0.66^{* *}$ |
| Owners | 0.797 | 0.735 | $0.062^{* * *}$ |
| Whites | 0.922 | 0.857 | $0.065^{* * *}$ |
| Seniors | 0.32 | 0.346 | $-0.026^{* * *}$ |
| Kids | 0.349 | 0.328 | $0.21^{* * *}$ |
| Poverty | 0.073 | 0.115 | $0.042^{* * *}$ |
| Total Population | 32,328 | 32,258 | 2,930 |
| Population <br> Density | 508 | 1333 | $825^{* * *}$ |
| District Rank | 0.625 | 0.579 | $0.046^{* * *}$ |
| Private School | 0.163 | 0.160 | 0.003 |
| College Grads | 0.327 | 0.251 | $0.076^{* * *}$ |
| Vacant Housing | 0.12 | 0.103 | 0.017 |
| Owner Tenure | 11.27 | 13.95 | $2.68^{* * *}$ |
| Median Age | 39.97 | 39.69 | 0.28 |
| Per Pupil <br> Spending | $\$ 10.58$ | $\$ 10.52$ | $\$ 0.06$ |
| Minority <br> Enrollment | 0.159 | 0.212 | $0.053^{*}$ |
| Total Enrollment | 5,453 | 4,615 | 838 |
| Approval Rate | $30.64 \%$ | $45.88 \%$ | $-15.24 \%^{* *}$ |
| N | 62 | 170 |  |
| *p<.05, **p<.01, ***p<.005 (one-tailed) |  |  |  |

districts to have relatively low population densities, and that is what we find. Though about $53 \%$ of these districts are located in towns and rural areas, more than a third of the districts are located in suburban areas.

One remarkable characteristic of the districts in this quadrant is the percentage of people who own their homes. On average, nearly $80 \%$ of the residents of the school districts in this quadrant are homeowners. As homeowners, though, they have remained in
the same home for less time than their counterparts in the other three quadrants. According to the literature, these two facts could be key reasons these districts passed so few of the tax increases proposed in 2011: Homeowners who are wary of tax increases that directly affect them and people without substantial ties to the community are less likely to vote for tax increases. (Berkman \& Plutzer, 2005, p. 44; Piele \& Hall, 1973, pp. 127-130)

Despite the relatively high level of education in these districts, most are probably not "brain hubs." The relatively small average minority presence in these districts tells us this. High levels of affluence, home ownership and Republican political orientation, though, intimate that perhaps a large proportion of people in these areas are successful entrepreneurs who have used their wealth to buy privacy and autonomy in relatively remote and sparsely populated communities. We cannot be certain about what the people living in these communities think about taxes and government services in general or the functioning of their school systems in particular because we only have aggregate level data, but it would be a reasonable guess that highly entrepreneurial people who demand privacy and want physical distance from others hold a good degree of skepticism about the effectiveness of any government agency (including the local school system), are willing to purchase private resources for their families should they be needed, and are disinclined to pay for additional government in the form of additional taxes, especially if they are dissatisfied with the services the government is providing to them.

## Conclusion

In this chapter I have established the analytical framework for the remainder of this dissertation. Recognizing that there is a significant amount of variability in our current understanding of school tax elections, in reliance on Lentz and Gimpel and Schuknecht, I
have suggested that school tax elections can best be understood in the context of their levels of wealth and their political orientations. I have argued that the reason for the mixed results I observe in the existing literature stems from the fact that most of the observations upon which they are based come, not from faulty methodology, but from the fact that the factors that turn an election in one kind of community may not be important in another kind of community. In particular, I have argued that rather than attempting to generalize from case studies that focus only on single cases or to draw conclusions from an undifferentiated universe of cases as a whole, it makes better sense to divide cases into district types so that each type of district can be considered without the "noise" emanating from districts that are not members of the group and don't share salient characteristics.

These problems can be addressed by grouping school districts in accordance with a four-cell typology defined by wealth and partisan orientation, two variables that seem together to explain a large portion of the variance in my dataset. Like Lentz, I have shown that grouping cases in accordance with the typology cells is a sensible and effective way to explain the in-group variance. This innovation alone should make it easier for school districts seeking tax increases to begin to make more effective plans for achieving them.

Having grouped the cases in my dataset by wealth and partisan orientation, I have been able to show that these subgroups are distinct and can be distinguished from each other by a number of demographic and social characteristics. In the next four chapters, I take a detailed look at each of these subgroups and make predictions about the intragroup factors that make it more likely that a district in the group will pass a tax increase. I begin with a look at the districts in the Googleplex group.

## Appendix 3A

## Googleplex Adopter Districts

Table 3A- 1 Googleplex Adopter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Alameda City Unified School District | Alameda | CA |
| Brisbane Elementary School District | San Mateo | CA |
| Burlingame Elementary School District | San Mateo | CA |
| Central Kitsap School District | Kitsap | WA |
| Cupertino Union Elementary School District | Santa Clara | CA |
| Davis Joint Unified School District | Yolo | CA |
| Dixie Elementary School District | Marin | CA |
| Englewood School District 1 | Arapahoe | CO |
| Esparto Unified School District | Yolo | CA |
| Gahanna-Jefferson City School District | Franklin | OH |
| John Swett Unified School District | Contra Costa | CA |
| Lafayette Elementary School District | Contra Costa | CA |
| Lake Washington School District | King | WA |
| Los Altos Elementary School District | Santa Clara | CA |
| Los Gatos-Saratoga Joint Union School District | Santa Cruz | CA |
| New Haven Unified School District | Alameda | CA |
| Nicolet Union High School District | Milwaukee | WI |
| Oak Park and River Forest District 200 | Cook | IL |
| Orange City School District | Cuyahoga | OH |
| Orcas Island School District | San Juan | WA |
| Pacific Grove Unified School District | Monterey | CA |
| Peotone Community Unit School District 207U | Kankakee, Will | IL |
| Port Angeles School District | Clallam | WA |
| Portland School District 1J | Multnomah | OR |
| Ravenswood City Elementary School District | San Mateo | CA |
| Shoreline School District | King | WA |
| South Shore School District | Bayfield | WI |
| Southern Boone County R-I School District | Boone | MO |
| Sunnyvale Elementary School District | Santa Clara | CA |
| Tamalpais Union High School District | Marin | CA |
| Wilmette School District 39 | Cook | IL |

## Googleplex Rejecter Districts

Table 3A- 2 Googleplex Rejecter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Arbor Park School District 145 | Cook | IL |
| Beaverton School District 48J | Washington, Multnomah | OR |
| Canfield Local School District | Mahoning | OH |
| Clatskanie School District 6J | Clatsop, Columbia | OR |
| Cuyahoga Heights Local School District | Cuyahoga | OH |
| Fern Ridge School District 28J | Lane | OR |
| Fontana Unified School District | San Bernardino | CA |
| Grand Valley Local School District | Ashtabula | OH |
| Hollister School District | San Benito | CA |
| Jefferson Union High School District | San Mateo | CA |
| Las Virgenes Unified School District | Ventura | CA |
| Olmsted Falls City School District | Cuyahoga | OH |
| Oregon City School District 62 | Clackamas | OR |
| Pleasanton Unified School District | Alameda | CA |
| Prospect Heights School District 23 | Cook | IL |
| Pueblo County School District 70 | Pueblo | CO |
| Riverside Brookfield Township School District 208 | Cook | IL |
| Rootstown Local School District | Portage | OH |
| Round Valley Unified District | Apache | AZ |
| Santa Clara Unified School District | Santa Clara | CA |
| St. Helens School District 502 | Columbia | OR |
| West Northfield School District 31 | Cook | IL |
| Westerville City School District | Franklin, Delaware | OH |

## Clintonland Adopter Districts

Table 3A- 3 Clintonland Adopter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Adams-Friendship Area School District | Adams | WI |
| Canton City School District | Stark | OH |
| Cleveland Heights-University Heights City School |  |  |
| District | Cuyahoga | OH |
| Davison Community Schools | Genesee | MI |
| Firelands Local School District | Erie, Lorain | OH |
| Grand Rapids Public Schools | Kent | MI |
| Groveport Madison | Franklin, Union | OH |
| Independence School District | Buffalo, Trempealeau | WI |
| Kalamazoo Public School District | Calhoun, Kalamzoo | MI |
| Lamphere Public Schools | Oakland | MI |
| McDonald Local School District | Trumbull | OH |
| Melrose-Mindoro School District | La Crosse | WI |
| Mogadore Local School District | Summit, Portage | OH |
| Northridge Local School District (Montgomery County) | Montgomery | OH |
| Norwood City School District | Hamilton | OH |
| Parma City School District | Cuyahoga | OH |
| Quillayute Valley School District | Clallam, Jefferson | WA |
| Troy R-III School District | Lincoln | MO |
| Washington Local School District | Lucas | OH |
| Woodhaven-Brownstown School District | Wayne | MI |

## Clintonland Rejecter Districts

Table 3A- 4 Clintonland Rejecter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Akron City School District | Summit | OH |
| Amherst Exempted Village School District | Lorain | OH |
| Benton-Carroll-Salem Local School District | Ottawa | OH |
| Cincinnati City School District | Hamilton | OH |
| Euclid City School District | Cuyahoga | OH |
| Field Local School District | Portage | OH |
| Garden City School District | Wayne | MI |
| Garfield Heights City School District | Cuyahoga | OH |
| Harrisburg R-VIII School District | Boone | MO |
| Howland Local School District | Trumbull | OH |
| Lake Local School District (Ottawa and Wood Counties) | Ottawa, Wood | OH |
| Mathews Local School District | Trumbull | OH |
| Maumee City School District | Lucas | OH |
| Midview Local School District | Lorain | OH |
| Mount Healthy City School District | Hamilton | OH |
| North Ridgeville City School District | Lorain | OH |
| Northwest Local School District (Hamilton Counties) | Hamilton | OH |
| Poland Local School District | Mahoning | OH |
| Saginaw Township Community Schools | Saginaw, Genesee, Bay | MI |
| Trotwood-Madison City School District | Montgomery | OH |
| Waterloo Local School District | Portage | OH |
| Willoughby-Eastlake City School District | Lake | OH |

## Smallville Adopter Districts

Table 3A- 5 Smallville Adopter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Advance R-IV School District | Stoddard | MO |
| Ash Grove R-IV School District | Greene | MO |
| Athens School District | Marathon | WI |
| Cedar Springs Public Schools | Kent, Newaygo | MI |
| Coldwater Community Schools | Branch | MI |
| Delaware City School District | Delaware | OH |
| Fairport Harbor Exempted Village School District | Lake | OH |
| Keller School District | Ferry | WA |
| LaCrosse School District | Whitman, Adams | WA |
| Lexington Local School District | Morrow, Ottawa | OH |
| Manistee Area Schools | Manistee | MI |
| Marietta City School District | Washington | OH |
| Marshall Public Schools | Calhoun | MI |
| Michigan Center School District | Jackson | MI |
| Newaygo Public School District | Newaygo, Muskegon | MI |
| North Pekin-Marquette Heights School District 102 | Tazewell | IL |
| Orangeville Community Unit School District 203 | Stephenson | IL |
| Ottawa-Glandorf Local School District | Putnam | OH |
| Prairie School District RE-11 | Weld | CO |
| Tekonsha Community Schools | Branch, Calhoun | MI |
| Union City Community Schools | Branch, Calhoun | MI |
| Walnut Grove R-V School District | Greene | MO |
| Wellington Exempted Village School District | Huron, Lorain | OH |
| White Lake School District | Langlade | WI |
| Wickliffe City School District | Lake | OH |
| Willard City School District | Huron | OH |
| Woodmore Local School District | Sandusky, Ottawa | OH |

## Smallville Rejecter Districts

Table 3A- 6 Smallville Rejecter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Adams County/Ohio Valley Local School District | Adams, Highland | OH |
| Atwood-Hammond Community Unit School District 39 | Champaign, Piatt, Moultrie, Douglas | IL |
| Barberton City School District | Summit | OH |
| Batavia Local School District | Clermont | OH |
| Black River Local School District | Ashland, Lorain, Medina | OH |
| Blanchester Local School District | Clermont, Clinton, Warren | OH |
| Cardinal Local School District | Geauga, Trumbull | OH |
| Clyde-Green Springs Exempted Village School District | Seneca, Sandusky | OH |
| Conotton Valley Union Local School District | Harrison | OH |
| Covert Public Schools | Van Buren | MI |
| Crawford AuSable Schools | Crawford, Ogemaw Oscoda, Roscommon | MI |
| Delphos City School District | Allen | OH |
| Douglas Unified District | Cochise | AZ |
| East Guernsey Local School District | Guernsey | OH |
| Edison Local School District | Carroll, Harrison, Jefferson | OH |
| Fairborn City School District | Greene, Montgomery, Clark | OH |
| Fredericktown Local School District | Knox | OH |
| Fremont Public School District | Muskegon, Oceana, Newaygo | MI |
| Geneva Area City School District | Ashtabula | OH |
| Genoa Area Local School District | Ottawa | OH |
| Graham Local School District | Champaign | OH |
| Greeneview Local School District | Greene | OH |
| Huber Heights City School District | Montgomery | OH |
| Jackson Public Schools | Calhoun, Eaton | MI |
| London City School District | Madison | OH |
| Mad River Local School District | Montgomery | OH |
| Mount Vernon City School District | Knox | OH |
| Niangua R-V School District | Webster | MO |
| North Fork Local School District | Licking, Knox | OH |
| Ontario Local School District | Richland | OH |
| Osnaburg Local School District | Carroll, Stark | OH |
| Ovid-Elsie Area Schools | Shiawassee, Saginaw, Gratiot, Clinton | MI |
| Park School District | Boulder, Latimer | OO |
| Patrick Henry Local School District | Henry, Putnam, Wood | OH |
| Pike-Delta-York Local School District | Fulton | OH |
| Selkirk School District | Pend Oreille | WA |
| St.Marys City School District | Auglaize | OH |
| Stryker Local School District | Williams |  |
| Tecumseh Local School District | Miami, Clark |  |


| Tiffin City School District | Seneca | OH |
| :--- | :--- | :--- |
| Vandalia-Butler City School District | Montgomery | OH |
| Villa Grove Community Unit School District 302 | Champaign | IL |
| Wadsworth City School District | Medina | OH |
| West Carrollton City School District | Montgomery | OH |
| West Clermont Local School District | Clermont | OH |
| Wyoming Public Schools | Kent | MI |
| Xenia Community City School District | Greene | OH |

## Goldwater Country Adopter Districts

Table 3A- 7 Goldwater Country Adopter Districts

| School District | County | State |
| :--- | :--- | :--- |
| Adna School District | Lewis | WA |
| Byers School District 32J | Arapahoe | CO |
| Cashmere School District | Chelan | WA |
| Cheyenne Mountain School District 12 | El Paso | CO |
| Columbia Local School District | Lorain County | OH |
| Green Local School District (Summit County) | Summit | OH |
| Independence Local School District | Cuyahoga | OH |
| Little Miami Local School District | Clermont, Warren | OH |
| Loveland City School District | Hamilton | OH |
| Madeira City School District | Hamilton | OH |
| Mammoth Unified School District | Mono | CA |
| Northville Public Schools | Oakland, Washtenaw, Wayne | MI |
| Prescott School District | Pierce | WI |
| Revere Local School District | Summit | OH |
| River Falls School District | Pierce | WI |
| Roaring Fork School District RE-1 | Pitkin, Eagle, Garfield | CO |
| Sylvania City School District | Lucas | OH |
| Tahoe-Truckee Joint Unified School District | El Dorado, Nevada Placer | CA |
| Wentzville R-IV School District | St. Charles | MI |

## Goldwater Country Rejecter Districts

Table 3A- 8 Goldwater Country Rejecter Districts

| School District | County | State |
| :---: | :---: | :---: |
| Beavercreek City School District | Montgomery, Greene | OH |
| Bennett School District 29-J | Adams, Arapahoe | CO |
| Berlin-Milan Local School District | Huron, Erie | OH |
| Brecksville-Broadview Heights City School District | Cuyahoga | OH |
| Brighton School District 27J | Adams, Weld | CO |
| Buckeye Local School District (Lorain and Medina Counties) | Medina | OH |
| Cave Creek Unified District | Maricopa | AZ |
| Centralia School District | Lewis | WA |
| Chardon Local School District | Lake, Geauga | OH |
| Climax Springs R-IV School District | Camden | MO |
| Cloverleaf Local School District | Medina | OH |
| De Beque School District 49-JT | Garfield, Mesa | CO |
| Douglas County School District RE-1 | Elbert, Douglas | CO |
| Eagle County School District RE 50 | Garfield, Eagle | CO |
| Earlville Community Unit School District 9 | DeKalb, LaSalle | IL |
| East Holmes Local School District | Holmes | OH |
| East Knox Local School District | Coshocton, Knox, Licking | OH |
| Falcon School District 49 | El Paso | CO |
| Garfield County School District 16 | Garfield | CO |
| Garfield School District RE-2 | Garfield | CO |
| Hilliard City School District | Franklin | OH |
| Kiowa School District C-2 | Elbert | CO |
| Kirtland Local School District | Lake | OH |
| Lake Holcombe School District | Chipewa | WI |
| Lakota Local School District (Butler County) | Butler | OH |
| Lebanon City School District | Warren | OH |
| Lee's Summit R-7 School District | Cass, Jackson | MO |
| Liberty Schools | Clay | MI |
| Mancos School District RE-6 | Montezuma | CO |
| Mesa County Valley School District 51 | Mesa County | CO |
| Mill A School District | Skamania | WA |
| Mokena School District 159 | Will | IL |
| Nordonia Hills City School District | Summit | OH |
| Riverside Local School District (Geauga and Lake Counties) | Lake | OH |
| Skamania School District | Skamania | WA |
| Stow-Munroe Falls City School District | Portage, Summit | OH |
| Strongsville City School District | Cuyahoga, Lorain | OH |
| Thompson School District R-2J | Larimer, Weld, Boulder | CO |
| Weld County School District RE-1 | Weld | CO |


| West Geauga Local School District | Geauga | OH |
| :--- | :--- | :--- |
| Woodland Park School District RE-2 | Teller | CO |
| Woodridge Local School District | Summit | OH |
| Yamhill-Carlton School District 1 | Yamhill | OH |

## Appendix 3B

Alternative Specification for Table 3-1

Table 3B-1 Alternative Specification for Table 3-1

| Variable | Coefficient (std. err.) | Min-Max Probability | Change in Probability from 1 Std. Dev. Below Mean to 1 Std. Dev. Above Mean | P Value (1-tail) |
| :---: | :---: | :---: | :---: | :---: |
| Educational Attainment | $\begin{gathered} 8.005 \\ (1.548) \\ \hline \end{gathered}$ | 0.758 | 0.178 | 0.000 |
| Homeowners | $\begin{array}{r} -1.185 \\ (0.99) \\ \hline \end{array}$ | -0.135 | 0.054 | 0.116 |
| Whites | $\begin{gathered} -0.08 \\ (0.751) \end{gathered}$ | -0.012 | -0.005 | 0.458 |
| Children | $\begin{gathered} -1.127 \\ (1.1822) \\ \hline \end{gathered}$ | -0.095 | 0.057 | 0.268 |
| Population Size | $\begin{gathered} -0.621 \\ (0.192) \\ \hline \end{gathered}$ | -0.682 | 0.288 | 0.0005 |
| Googleplex | $\begin{gathered} -0.902 \\ (0.454) \\ \hline \end{gathered}$ | -0.161 | N/A | 0.023 |
| Smallville | $\begin{gathered} -0.677 \\ (0.186) \end{gathered}$ | -0.135 | N/A | 0.000 |
| Goldwater Country | $\begin{gathered} -1.797 \\ (0.411) \\ \hline \end{gathered}$ | -0.319 | N/A | 0.000 |
| Constant | $\begin{gathered} 4.426 \\ (2.628) \\ \hline \end{gathered}$ |  |  | 0.046 |
| N | 232 |  |  |  |
| Pseudo R ${ }^{2}$ | 0.1303 |  |  |  |

## Chapter 4

## Brain Hubs and Servants' Quarters

The school districts in the Googleplex districts are the wealthiest districts in the dataset. Adjusted median home values for the Googleplex districts, at close to $\$ 415,000$, are more than double what they are for the rest of the dataset and over $\$ 135,000^{51}$ more than their Republican peers in Goldwater Country. A closer look at home values in the Googleplex group reveals that, on average, the home values in the districts that approved tax increases were over $\$ 169,000$ greater than the average value prevailing in the districts that rejected them. ${ }^{52}$ This large difference in adjusted median home values gives weight to the claim that I made in Chapter 1: The Googleplex group consists of two economically distinct subgroups, which, as we shall see later, diverge from each other on the basis of educational attainment.

I have used home values as an indicator of wealth. There is no question that being able to afford a tax increase is a key factor in whether a community will pass it, and so it is not surprising that in addition to being the wealthiest quadrant, the Googleplex group adopted over $57 \%$ of the tax increases it considered, which is the highest percentage of tax increases adopted of any of the groups in the dataset.

All other things being equal, if there are two communities, one wealthy and the other less so, it would be fair to guess that the wealthier community is more

[^33]likely to be willing to adopt a tax increase. But knowing that the wealthier community could better afford to pay more in taxes than the other doesn't tell us why the community would choose to impose additional burdens on itself. After all, a district in which the median level of wealth is relatively high should also have a significant number of people in it who can either do without the public goods the tax increase would buy or be able to provide those goods for themselves without also providing them to others who will pay less for them. The Goldwater Country group, for example, is the next wealthiest set of districts in the dataset (measured by adjusted median home values) and it adopted the smallest percentage of tax increases.

There are two possible explanations for the behavior in the Googleplex group of districts. The first is the Homeowner Hypothesis discussed in Chapter 2. The argument is that the people in this quadrant have made a substantial investment in their homes and, provided that a school tax increase enables the district to maintain or improve its quality, a modest school tax increase would support or improve the resale value of their homes. Thinking along these lines, school district homeowners would expect, as Warren and Tyagi posit, that families with high incomes would bid up the prices of homes in order to get their children into excellent school districts. (Warren \& Tyagi, 2004)

The second possibility, the Educational Attainment Hypothesis, regards a district's wealth as the result of another underlying factor that both explains a district's wealth and suggests the reason that some of the Googleplex districts that adopted tax increases in 2011 while others did not. This hypothesis holds
that well educated people understand, through their own experience, the material and purposive benefits good education brings and seek to duplicate their experiences for the next generation. In this chapter, I argue that the Educational Attainment Hypothesis provides the best way to understand the voting behavior in the Googleplex group of districts.

As I will do in this and the next three chapters, I first provide a brief overview of the school districts in the group. The overview will highlight various factors that I will use in developing theories for explaining how this group of districts reacted to requests for school tax increases and for constructing hypotheses to test the theories. I then and use the general-purpose logistic regression model to see whether there is any support for my hypothesis in the data, particularly in the face of the other hypotheses discussed in Chapter 2. Finally, by way of illustration, and to fill in the lacunae the statistical analysis has left, I provide case studies of an Adopter district and a Rejecter district. The case studies add weight to my claim that educational attainment is the key factor in distinguishing Adopter districts from Rejecter districts, and, by comparing the theoretically nonpartisan vote on the school tax question with the highly partisan vote in the 2008 and 2012 presidential elections, they also show how political orientation affects school tax elections in this quadrant of the typology.

## Overview of the Googleplex Districts

As I noted in Chapter 3, in addition to having the highest average adjusted median home values in the dataset, the Googleplex group of districts has the
highest level of educational attainment. There is a significant 18 percentage point difference between the mean level of educational attainment in the Googleplex districts and their counterparts in the Clintonland districts, ${ }^{53}$ a significant 21.9 percentage point difference between the Googleplex districts and the Smallville districts ${ }^{54}$ and a significant 8 percentage point difference between the Googleplex districts and their affluent Republican peer districts in the Goldwater Country districts. ${ }^{55}$

In the Googleplex group of districts, adjusted median home values and educational attainment are highly correlated at $\mathrm{r}=0.75$. Home values and educational attainment are not always functions of each other. In the Clintonland districts, the correlation is only $\mathrm{r}=0.01$, in the Smallville districts it is only $\mathrm{r}=0.17$ and in affluent Goldwater Country, the correlation is only $\mathrm{r}=0.36$. Though correlations cannot tells us which of the correlated factors caused the other, in the case of the Googleplex group, it seems more reasonable to infer that education was the source of the high home values rather than to infer that higher levels of education are rooted in home values. ${ }^{56}$

The Adopters and Rejecters in the Googleplex districts are easily distinguishable from each other demographically. The key difference between
${ }^{53} \mathrm{p}=0.000$
${ }^{54} \mathrm{p}=0.000$
${ }^{55} \mathrm{p}=0.001$ (one tailed)
${ }^{56}$ For home values to influence educational attainment, we would expect that people would have to have been living in their current homes throughout their educational careers. That is probably not the case. Median tenure is less than 13 years and the median age is about 40. If home value was the causal agent, that would mean that the median age at which residents began their educational career would have been about 27. Common experience tells us that most people have completed their educations well before they reach their 30s.
them is educational attainment. The level of educational attainment in Adopter districts is, on average, a statistically significant 13.5 percentage points higher than it is in the Rejecter districts. ${ }^{57}$ This is an example of what Moretti calls the "Great Divergence," a separation of communities into what Moretti calls "brain hubs" on the one hand and into what I have called "servants' quarters" on the other:

America's new economic map shows growing differences, not just between people, but between communities. A handful of cities with the "right" industries and a solid base of human capital keep attracting good employers and offering high wages, while those at the other extreme, cities with the "wrong" industries and a limited human capital base, are stuck with dead-end jobs and low average wages. . . . Geographically, American workers are increasingly sorting along educational lines. At the same time that American communities are desegregating racially, they are becoming more segregated in terms of schooling and earnings (Moretti, 2013, pp. 3-4).

The 13.5 percentage point difference in educational attainment between the Adopter districts and the Rejecter districts in the Googleplex group manifests itself in the careers of their residents. While, overall, $52 \%$ of the residents of the Googleplex districts are working in white collar jobs that require a college education, that percentage swells to $61 \%$ in the districts that adopted tax increases and falls to $48 \%$ in the districts that rejected them. These differences

[^34]in careers may well provide the best practical explanation for the $\$ 169,000$ difference between Adopter and Rejecter districts in average median home values. ${ }^{58}$

Beyond economics, Adopter districts differ from Rejecter districts in racial composition and in the utilization of private schools. In the Adopter districts, the percentage of whites is a statistically significant 8.8 percentage points lower than in Rejecter districts. ${ }^{59}$ Adopter districts also send about 4.5\% more of their children to private school than do Rejecter districts. ${ }^{60}$

## Basic Test of Hypothesis

If, as I claim, the Educational Attainment Hypothesis is the best explanation of why a district in the Googleplex group voted for a tax increase, in a logistic regression of election result on variables representing all of the hypotheses described in Chapter 2, the variable representing the Educational Attainment Hypothesis should have the largest statistically significant effect on the likelihood of voting yes. Table 4-1 provides evidence on this point. For the

58 While the Rejecter districts tend to be somewhat smaller and less densely populated, and the proportion of rural Rejecter districts is more than twice as large as the proportion of rural Adopter districts, the large statistically significant difference in adjusted median home values is not attributable to the mix of locations that comprises the two subgroups. Comparing just the suburban Adopter districts with the suburban Rejecter districts still yields a statistically significant difference of almost $\$ 193,772^{58}$; aggregating the suburban and urban districts together, accounting for $83.87 \%$ of the Adopter districts and $73.91 \%$ of the Rejecter districts still yields a statistically significant difference in favor of the Adopter districts of over $\$ 164,000 .{ }^{58}$ There were not enough cases of rural districts, towns and cities to determine whether the mean values differed from each other significantly.
${ }^{59} \mathrm{p}=0.021$ (one-tailed)
${ }^{60} \mathrm{p}=0.008$ (one-tailed)

Googleplex school districts, the general level of education attainment prevailing there is the most influential variable. Holding all other variables constant at their

Table 4-1 Logistic Regression Model for Googleplex Group

| Variable | Coefficient <br> (std. error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 Std. <br> Dev. Below <br> Mean to 1 <br> Std. Dev. <br> Above Mean | P value <br> (1-tail) |
| :--- | :---: | :---: | :---: | :---: |
| Educational | 11.388 <br> $(3.327)$ | 0.895 | 0.575 | 0.0005 |
| Attainment | -5.428 <br> $(4.905)$ | -0.49 | -0.232 | 0.134 |
| Homeowners | -0.652 | -0.08 | -0.039 | 0.327 |
| Whites | $-3.469)$ | -0.192 | -0.08 | 0.365 |
| Seniors | $-7.399)$ | -0.458 | 0.167 | 0.054 |
| Children |  |  |  |  |
| Total Population | $-1.365)$ | -0.103 | -0.781 | -0.335 |
| (log) | $(0.51)$ |  | 0.015 |  |
| Constant | 10.835 |  |  |  |
| N | $(4.88)$ |  |  |  |
| Pseudo R ${ }^{2}$ | 0.2772 |  |  |  |

actual values, as educational attainment increases from one standard deviation below the mean to one standard deviation above the mean, the likelihood that a community will adopt a tax increase improves by $57.5 \%$. ${ }^{62}$

Table 4-1 also tells us that the variables that typically measure selfinterest do not, in the Googleplex Districts, work the way the other hypotheses might lead us to expect them to work. First, the model provides no support for

[^35]the Homeowner Hypothesis because the Homeowners variable fails to reach statistical significance. For the same reason, the model provides no support for the Parenthood Hypothesis. Even if we focus on the substantive significance of the Children variable instead of on its statistical significance, the coefficient's sign is negative, implying that the smaller the percentage of households with children there is in a community, the more likely it is to adopt a tax increase. This is clearly something theory does not expect.

The fact that the racial diversity variable ("Whites") does not reach statistical significance in either specification of the model provides additional support for the Educational Attainment Hypothesis. Under the Racial Diversity Hypothesis, we should expect the likelihood of adopting a tax increase to decline as the percentage of whites in the community declines because we expect a white majority population to be increasingly unwilling to provide benefits to nonwhites as the size of the outgroup population grows. But in the Googleplex group of districts, racial diversity is higher than anywhere else. That racial diversity does not seem to matter is consistent with what Moretti and Florida have told us to expect in brain hubs. Increasing racial diversity is a hallmark of economies based on intellectual work because employers seek to attract the best talent without regard to irrelevant characteristics such as race, gender or national origin. What matters in these types of communities is talent developed through education (Florida, 2012, pp. 56-59). ${ }^{63}$

[^36]It is notable that the variable in the model that points to attachment to community—Total Population (log)—seems to lend some support to the Community Affinity Hypothesis. The variable reaches statistical significance and has a substantial impact on the results of tax elections in this group.

Considering all of these results, it is fair to infer from the evidence that the Adopter districts in the Googleplex districts were probably not significantly moved by concerns about immediate material benefits. Instead, it is likely that their voters were interested in passing the advantages education conveys down to the next generation. Table 4-1 makes it clear that many of the other conventional explanations discussed in Chapter 2 are not relevant in this quadrant of the typology. The fact that in the Alternative Specification shown in Table 4A-1 in the Appendix, the only variable to reach statistical significance is the one that measures educational attainment bolsters this conclusion.

## Detailed Illustrations

Returning, now, to the larger themes of this project, I am particularly interested in the role, if any, that wealth and partisanship played in the outcome of school tax elections in the Googleplex districts. My results show that in the Googleplex group of districts, at an aggregate level, there is a link between education and wealth, which, in turn, influences electoral outcomes in this group of districts.

[^37]While we now know that Democratically oriented, better-educated, wealthier districts tend to support school tax increases, we do not yet know whether this is so at a lower level of abstraction. Because there is no uniform and reliable measure of partisan intensity for any of the school districts in the dataset, we also do not yet know the extent to which partisan attitudes may have influenced the vote. It could be that well educated, wealthy voters who tend to prefer voting for Democrats may support increased school taxes as an ideological matter. ${ }^{64}$ It could also be, though, that people living in Democratic areas with expensive homes who might otherwise wish to avoid paying higher taxes are being outvoted by their less well-educated and poorer neighbors. In this section, I present case studies of the Portland (an Adopter district) and St. Helens (a Rejecter district) school districts to address this point.

My analysis begins with the fact that local voting precincts are typically compact geographic units that tend to include homes that are similar to one another and are often valued in the same price range. I also make use of the fact that precincts tend to be "general use" political units that cast ballots on a number of things from time to time, including school tax and presidential elections. Presidential elections are both highly publicized and overtly partisan. While candidates for major political offices sometimes try to obscure their partisan identities to avoid being associated with the president or with unpopular policies, actions or individuals linked to their parties, presidential candidates

[^38]cannot do this. The vote for president is generally a highly partisan act that has customarily been used as a yardstick for measuring the ideology of a community (see Ardoin \& Garand, 2003, p. 1169 and studies referenced therein). Under ordinary circumstances, precincts that are ideologically Republican or Democratic can be expected to favor their parties' respective presidential candidates by wide margins (Abramowitz, 2012). In precincts that are not as highly ideological, we expect the winning presidential candidate to prevail by narrow margins.

On the other hand, while both political parties may have preferred positions on education, local school tax proposals are at least nominally nonpartisan issues upon which it is unusual for a local political party to take a stand. For many of these issues, we might expect local voters to take their cues about how to vote from local circumstances and not from party elites. Without partisan cues or priming, we would expect people to base their vote for or against a tax proposal that will affect them directly on the merits of the proposal, regardless of for whom they would vote for in a presidential election. If a community decides a ballot question on the merits without regard to partisan ideological thinking, there should be only a weak correlation (if any at all) between the presidential vote and the vote on the proposition. Conversely, if the pattern of voting for a school tax bears a strong relationship with the pattern of voting for president, we have evidence that the tax question may have become incorporated within a more partisan ideological framework.

If a school tax issue has become embedded within a partisan ideological framework, we should not expect the percentage of the vote cast by any precinct for or against a school tax question to approximate the percentage of the vote cast by that precinct for either presidential candidate. My claim is that if ideological considerations are influencing the vote on the school tax to any large extent, the precinct-by-precinct pattern of voting in both elections will be similar. For purposes of consistency in this and the next three chapters, I have compared the vote in favor of Barack Obama in either 2008 or $2012^{65}$ to the vote in favor of the school tax, on the assumption that approving the tax is more consistent with a Democratic orientation; I could just as easily have compared the vote in favor of Mitt Romney or John McCain and the vote against the school tax because the absolute value of the correlation will be the same. By this procedure, I do not mean to imply that voting in favor of the school tax requires any great sympathy for a Democratic presidential candidate. School districts that detest Democratic candidates might still be acting ideologically when they approve a tax increase if the pattern of the vote on the tax has a strong relationship with the pattern of the vote cast for the Democrat.

Data on vote by precinct both in presidential elections and in school tax elections is easy to find and generally available for download from local boards of election. Information on home values is much more difficult to acquire. In some places, county tax assessment records are available to the public without charge.

[^39]Where those records were not available, I used value assessments provided by private real estate companies. The real estate value information used in this chapter comes from Zillow.com, a publicly held company that operates an online database of residential real estate. For each property in the database, Zillow.com has created a "Zestimate" of the property's fair market value. Each Zestimate is based on publicly available information about a home including total square footage, location, number of bathrooms, number of bedrooms, lot size, tax assessments and comparable recent sales in the area (Zillow.com, 2011). The accuracy of any one "Zestimate" is not important for present purposes. What is important is that Zillow.com has applied the same methodology to real estate in the same market, and so even if a particular Zestimate is wrong, or even if all of its Zestimates are wrong, the real estate values presented will be correct relative to each other. Since there can be hundreds of properties in any given precinct, I selected between 30 and 50 homes from each precinct and recorded their Zestimates by hand. I then computed an average home value for each precinct in each of the school districts I selected as an example of an Adopter district and a Rejecter district.

By considering real estate valuation data with election return data, I can assess the extent to which political and economic considerations affected the school tax vote in the Adopter and Rejecter communities profiled in this and the next three chapters. Since, at an aggregate level, education and home values are highly correlated in this quadrant, I predict that the precincts with high home values will also produce high percentages of votes in favor of the tax increase.

Since the Googleplex districts are Democratic in political orientation and since taxation is not the "hot button" issue to these kinds of voters that it is to Republicans, the results of the school tax election should be highly correlated with the vote for president for Adopters but more moderately correlated, if at all, with the vote for president for Rejecters. This should be so because tax increases are a greater threat to the family budgets of the less affluent than they are to the more affluent. Rejecter districts in this quadrant of the typology have lower levels of educational attainment and therefore, less wealth.

## Portland Schools District 1J, Oregon

The Portland school district is the largest school district in the Googleplex group of districts. The district includes about 80\% more people than the next largest school district in the group and is more than 2.5 times larger by population than the next largest Googleplex district that voted in favor of a tax increase. It services more than six times more students than the average Googleplex Adopter district. The Portland school district has about the same level of diversity as the other Googleplex Adopters, and though the general level of educational attainment in Portland is somewhat higher than the average Googleplex district and the percentage of college graduates is somewhat lower than average, the differences are not significantly different from zero.

Portland, Oregon is a clear example of a brain hub. According to Moretti, of all U.S. metropolitan areas, Portland has the $14^{\text {th }}$ largest population of college graduates (Moretti, 2013, p. 94) and it produces almost as many patents per capita as does Boston (Moretti, 2013, p. 202). Portland is a major producer of
silicon computer chips, and it is trying to "build the most sustainable economy in the world . . . [to] become the capital of the global green economy" (Portland Development Commission, 2012). SolarWorld, one of Germany's top manufacturers of solar cells, has its North American headquarters and what it describes as "the largest and most advanced solar photovoltaics production facility in the Western Hemisphere" in Hillsboro, which is about 20 miles outside of Portland. It placed its facilities in Hillsboro specifically because of its proximity to a "trained high-tech work force." 66 Vestas, a large producer of wind turbines is also located nearby.

In the Portland metropolitan area, high-tech industries are able to find the kinds of workers that they need because, with its relaxed atmosphere, recreational opportunities and cultural amenities, Portland has been able to attract a large number of young, college educated people. As of the early part of the last decade, according to Cortright, "Portlanders [were] more physically active and recreationally oriented than the typical American, more literate and less television-addicted, more techonolgically adept and more environmentally active" (Cortright, 2002, p. 9). Portland features a large number of used book stores, microbreweries and coffee shops, Quoting Cortright, Bishop describes the Portland economy as built on "books, beer, bikes and Birkenstocks" (Bishop, 2009, p. 198) Portland has become attractive to the kind of people who "want good public transportation and city life . . . they want to be able to buy certain

[^40]books, see certain kinds of movies, and listen to particular styles of live music" (Bishop, 2009, p. 201).

Portland's cosmopolitan lifestyle is so attractive that people will apparently accept less in compensation than they could earn elswhere to live there (See Value of Jobs Coalition, 2013). Though some of this can be attributed to the fact that Portland has a large number of people with degrees in the humanities and arts that lead to relatively lower paying jobs and a relatively small number of people with degrees in business, finance, management and law, (Value of Jobs Coalition, 2013), something else is going on. Portland workers who are in business operations and finance make about $\$ 19,000$ per year less than the national average; lawyers make about \$43,000 less per year than the national average, (Value of Jobs Coalition, 2013). There are similar differentials for many other professions. Bryce Ward, an economist who was the lead researcher for the Value of Jobs Coalition, believes that "there is something different about who is choosing Portland and what else Portland is offering to get them here that is not money" (Hammond, 2013).

Residents of Portland take public education seriously. Six of the 18 high schools in the Portland school district have been rated as top schools by U.S. News and World Report. ${ }^{67}$ In a public opinion poll conducted in March of 2011, using a 10 point scale of important issues facting the Portland area, $47 \%$ rated education as either a nine or a ten, higher than any other concern except "the

[^41]economy". ${ }^{68}$ In the same poll, $61 \%$ rated "having good quality schools" either a 9 or a 10 on a scale listing factors important to having a good quality of life.

All of this has given rise to a politically liberal orientation. Portland has become very much a stronghold of the Democratic Party. Barack Obama won over $75 \%$ of the vote in Portland in both the 2008 and 2012 presidential elections. Considering only the Portland school district, Obama won almost 85\% of the twoparty vote in 2008. Both of the legislators who represent the Portland school district's zip code in the lower house of the state's legislature are Democrats. Portland's mayor and all of its four commissioners are also Democrats.

In 2011, the Portland school district sought to raise an additional \$21 million for school operations. That entailed asking voters to raise property taxes by $\$ 0.74$ per $\$ 1,000$ in assessed property values. According to the League of Women Voters, a Portland homeowner at the median assessed home value would see property taxes increase from about $\$ 184.00$ per year to $\$ 300.00$ per year or about $\$ 9.67$ more per month for five years. ${ }^{69}$ Portlanders for Schools, a private group, raised $\$ 1.2$ million to campaign in favor of the tax increase, claimed to have knocked on 60,000 doors and estimated that it made 35,000 phone calls in support of the effort. ${ }^{70}$ There was apparently no organized opposition to the tax, although a group named Learn Now, Build Later

[^42]campaigned against an associated bond issue, the proceeds of which Portland school district said it needed for school construction and renovation. Proponents of the tax increase insisted that the additional funds were necessary to prevent the school system from having to lay off 200 teachers and increase class sizes. Opponents argued that additional taxes would be difficult for taxpayers to bear during the recession. ${ }^{71}$

The Portland school district adopted the tax increase by a vote of $58 \%$ in favor to $42 \%$ opposed. To illustrate the influence of political ideology on the vote, in Figure 4-1, I plot the percentage of votes in favor of the school tax and the percentage of votes cast for Barack Obama in 2008 by precinct, with precincts ordered from lowest percentage of the vote in favor of the tax increase to the highest together with trend lines that facilitate the comparison. The red line represents the precinct-by-precinct vote for Obama while the blue line represents the the precinct-by-precinct vote on the school tax.

[^43]Figure 4-1 Portland Vote for School Tax increase and Barack Obama


The two lines both have similar positive slopes; their underlying datapoints have a correlation of $r=0.75$. A regression of the precinct-by-precinct vote on the school tax on the precinct-by-precinct vote for Barack Obama discloses that the latter is a highly significant predictor of the school tax vote. By itself, the vote for Barack Obama explains over 55\% of the variation in the vote on the school tax; each 1 percent increase in a precinct's vote for Barack Obama predicts about a $1.25 \%$ increase in the vote for the school tax. This is strong evidence that even though the school tax election was a formally nonpartisan issue, partisan political orientations played an important role in it.

The impact of wealth, measured by precinct average home value, is not quite as clear. In Figure 4-2, I plot the results of both the 2008 Presidential vote and the 2011 school tax election for the 10 Portland districts that cast the lowest percentage of votes in favor of the school tax. The precincts are arranged in ascending order by average home value. As should be expected in a place populated by liberal Democrats, all of the precincts favored Barack Obama by a large margin. There is not much variation (and therefore, not much of a pattern) in the presidential vote: It ranged only 7 percentage points between the highest and lowest average home value precincts. In these districts though, the school tax did not fare as well as the Democratic presidential candidate: The percentage of the vote in favor of the tax increase ranged between $28 \%$ and $41 \%$ though the percentage of the vote did tend to increase as the average home value increased. Overall, the correlation between the precinct-by-precinct vote in the presidential election and the school tax election in these 10 precincts was only a modest 0.38 ,

Figure 4- 2 Portland School Tax and Presidential Vote -- Lowest Precincts

about half of what the correlation between the 2008 Presidential vote and the school tax vote was without regard to home value.

On the other hand, for the 10 precincts that cast the highest percentages of votes in support of the school tax, the correlation between the presidential vote and the school tax vote was about 10 percentage points higher. However, once again, this was well less than the correlation between the two votes depicted in Figure 4-2. While the two votes depicted in Figure 4-3 show a more robust correlation, there is not much variation. The percentage of the 2008 presidential vote that went to Barack Obama varies by about four percentage points and the total range for the vote on the school tax is only nine percentage points including the one precinct-precinct 4027--that appears to be a small outlier.

What is striking about Figures 4-2 and 4-3 are the relative sizes of the gaps between the lines. It should be no surprise that the level of support a preferred candidate receives would be higher than the level of support a ballot initiative that promises to cost the voters money receives. As a matter of selfinterest, a vote for Barack Obama can be seen as a symbolic act of identification because there are no immediate adverse consequences to a supporter for casting such a vote. Any personal pecuniary consequences the voter experiences are likely to be diffuse and attenuated, resulting from eventual changes in national policy. This is not so for a vote likely to cost the average voter about $\$ 116.00$ more per year.

Portland is a liberal Democratic bastion, and so it is unlikely to harbor any of the almost reflexive aversion to additional taxes generally expected of

Figure 4- 3 Portland School Tax and Presidential Vote-- Highest Precincts


Republican oriented places that I will discuss in greater detail in Chapters 6 and 7. Conflicting political ideology, therefore, does not explain the gaps. Democrats do not dread the growth of the state the way Republicans typically do: Judging by the results of an October 2011 Harris poll, Democrats are general much more sympathetic to education than are Republicans. ${ }^{72}$ But, while there may be a general partisan impulse to support the tax, a voter probably feels a lot less enthusiasm for the cause when it will cost him or her money.

That may explain why the school tax vote percentages are always below the presidential vote percentages, but it does not explain the difference in the sizes of the gaps. What best explains the size of the gaps is wealth, pure and simple. The precincts depicted in Figure 4-2 are all strong Democratic precincts, and were ideology the crux of the matter, we might expect the vote on the school tax to track the presidential vote the way it does in Figure 4-3, albeit with a lower intercept, given the lower intercept on the presidential vote line. In the 10 precincts that voted against the school tax by the greatest margin, the precinct average home values range from $\$ 145,600$ to $\$ 311,300$. The average precinct home values for the precincts that provided the highest percentages of their votes in support of the school tax begin at $\$ 314,000-$ - 2,700 more than the highest average precinct value for the other group--and end at $\$ 486,150$. Since

[^44]the tax is based on assessed home value, this latter group would end up paying more in absolute terms. Because they have higher home values, though, they are probably not as concerned about the impact of the tax on their family budgets as the people in the less expensive home value precincts, who will probably feel the weight of the tax more directly. If the people living in the precincts with more expensive housing were, in fact, less concerned about the impact of the tax on their own consumption, they would be freer to vote in accordance with their political views. This is might be why the school tax line in Figure $4-2$ has a mild positive slope: People living in the Googleplex Adopter districts may become more willing to vote in accordance with their political orientations as the financial consequences of that vote become more affordable.

## St. Helens School District 502, Oregon

The St. Helens school district sits about 25 miles northwest of the center of Portland, Oregon. It is home to about 20,000 people. Though the St. Helens school district has a land area of approximately 100 square miles and a theoretical population density of about 195 people per square mile, ${ }^{73}$ three quarters of the population lives in either the city of St. Helens (which is the county seat of Columbia County, Oregon) or in Columbia City, where the population densities are much higher. The remaining 5,000 people are scattered around the school district's rural precincts. The St. Helens school district operates one high
${ }^{73}$ I call these population density numbers "theoretical" because, to arrive at them, the American Community Survey simply divides the total population by the school district's land area. It does not take into account the fact that while the bulk of the population may live in densely populated population centers, the school district may have a large amount of farmland, parkland or undeveloped land.
school, one middle school, two elementary schools and two alternative schools, together serving about 3,650 students.

The St. Helens school district is within Portland's economic orbit. According to the school district's website, it has "small and large acreage home sites. . . for families who choose the rural life but have easy access to the Portland Metro area. Many of our parents commute to work in the Portland Metro area on a daily basis, preferring the lifestyle of a smaller semi-rural area." ${ }^{74}$

The St. Helens school district, though, is not a bedroom suburb of Portland, a place where Portland area workers simply choose a different lifestyle than is available in a big city. The people who live in the St. Helens district are demographically quite different from the people who live in Portland. The adjusted median home value for the St. Helens school district is almost $\$ 113,000$ less than it is for Portland, and St. Helens school district residents earn, on average about $\$ 6,250.00$ less annually than do Portland residents.

These differences are probably attributable to the large differences in educational attainment between Portland residents and St. Helens school district's residents. On my measure of educational attainment, the St. Helens school district scores more than 27 percentage points lower than does Portland, and the percentage of the population holding at least bachelor's degrees in the St. Helens school district is more than 29 percentage points lower than it is in Portland.

[^45]This, in turn, is apparent in the kinds of professions and industries the people in these places choose. In Figure 4-4, I compare the top careers for people working in the St. Helens and Portland school districts. In Figure 4-5, I compare the top industries employing people in the two school districts. In all, Figure 4-4 accounts for $85.7 \%$ of the work force in the St. Helens school district and $95.66 \%$ of the Portland school district work force; Figure 4-5 accounts for $66.48 \%$ of the St. Helens school district work force and $74.01 \%$ of the Portland school district work force.

Figure 4-4 Top Careers in Portland and St. Helens


Figure 4-5 Top Industries in Portland and St. Helens


In the St. Helens school district, the two largest categories of workers are managers/professionals and salespeople. While the Portland school district has a slightly smaller percentage of workers engaged in sales, the percentage of workers who work as managers/professionals is almost twice as high. The percentage of Portland workers engaged in production, manufacturing and material moving is only half as big as it is in the St. Helens school district, and in the St. Helens school district, the percentage of people working in construction, extraction maintenance and repair is almost three times bigger than it is in Portland school district. In the Portland School district, on the other hand, almost $87 \%$ of its workers are managers, professionals, salespeople and people who provide services.

A fair inference from the employment and the educational data provided above is that the St. Helens school district is probably a "servants' quarters" area composed largely of working class people for whom family financial considerations are quite important. While the district's median adjusted home value is about $\$ 52,000$ higher than the median for the dataset, given its distribution of educational attainment and careers, the St. Helens School District provides evidence of Moretti's claim that highly educated areas bring wealth not just to the highly educated, but to everyone in the community (Moretti, 2013, pp. 4-5).

Politically, the St. Helens school district leans Democratic, though not as strongly as the Portland school district. The mayors of both of the main population centers, Columbia City and St. Helens, are Democrats as are three of the four members of the St. Helens City Council. ${ }^{75}$ In 2012, Barack Obama received almost $55 \%$ of the two party vote cast in the St. Helens school district, a healthy majority, to be sure, but not anywhere near the percentage cast for Obama in the Portland school district.

In 2011, the St. Helens school district found itself in more severe fiscal straits than did the Portland school district. In addition to state cutbacks that affected every Oregon school district equally, the St. Helens school district was facing a decline in enrollment that, in turn, affected the state funding formula: Fewer students meant fewer state dollars. To close its projected deficit, the St.

[^46]Helens school district decided to ask voters for an additional $\$ 1.6$ million through a levy that would increase the tax rate for five years by $\$ 1.20$ per $\$ 1,000$ assessed value. ${ }^{76}$ For a home assessed at $\$ 210,000$, that would have amounted to about $\$ 21.00$ in additional taxes per month or $\$ 252.00$ per year. Approving the levy would have made it possible for the district to maintain (i) its K-6 music, library and physical education programs; (ii) current class sizes in grades K-6; (iii) its current level of courses for grades 7-12; (iv) its alternative high school program; (v) extra-curricular athletic programs for grades 7-12; and (vi) high school activities such as band, choir, drama, yearbook and newspaper without substantial cuts to the faculty resulting in larger class sizes. ${ }^{77}$

Voters rejected the tax increase by a vote of $36.18 \%$ in favor to $63.82 \%$ opposed. This vote was apparently not heavily influenced by political ideology. ${ }^{78}$ First of all, if ideological concerns were important here, we should see a high correlation between the vote for president and the vote on the school tax just as we did in the Portland school district. In fact, the correlation between the two votes is a quite modest $r=0.34$, less than half of what it was in the Portland school district. Figure $4-6$ shows the relationship between the two votes on a

[^47]Figure 4-6 St. Helens School Tax and Presidential Vote

precinct-by-precinct basis. Like the Portland school district, there is an overall gap between the two lines, but unlike the Portland school district, the voting patterns are much less consistent.

Figure 4-7 suggests an explanation for this pattern. In Figure 4-7, I arrange the precincts in order by average precinct home value and then plot the results of the two elections. Overall, the correlation between average precinct home values and the percentage vote for Obama in 2012 was $r=-0.61$. As one might expect, voters in this Democratic leaning school district voters preferred Barack Obama to Mitt Romney in 2012; Obama just barely lost only two of the 18 precincts in this school district. Voters in the precincts with average precinct home values of $\$ 200,000$ or less, though, voted in much greater percentages for the President than did voters in precincts where the average precinct home value was greater than $\$ 200,000$.

Assuming that the voters in the precincts with average home values below $\$ 200,000$ are, in fact, less well off financially than the people living in the higher average home value precincts, a fair inference is that these voters either did not see any harmful economic consequences flowing from Obama's reelection, or thought of themselves as being net recipients of the income redistribution policies that Democrats tend to favor. On the other hand, while, for the most part, still favoring Obama over Romney, the people living in the precincts with higher average home values were less enthusiastic about the President, perhaps

Figure 4- 7 St. Helens Home Value, Presidential Vote and School Tax Vote

because they thought that they would be affected less positively by policies favored by Democratic politicians, and if this is so, than it can explain the negative correlation.

The same reasoning should apply to the school tax issue. We observe, first of all, that there is a sizable intercept gap between the presidential vote and the school tax vote, just as we saw in the Portland school district. If one is voting consistently with ideological principle, it is still far easier to vote for a favored candidate than for policies that will cost money in the immediately foreseeable future. In this regard, it should be remembered that there are significantly more homeowners in the St. Helens school district than there are in the Portland school district. Proportionately more households would, therefore, be affected directly by a tax increase in the St. Helens school district than in the Portland school district. Second, for people living in precincts with average home values of $\$ 200,000$ or less, the trend line is more or less flat. While the voters in these precincts generally opposed the tax, the level of support for the tax does not materially increase or decrease with home values. For voters in these precincts, ideology does not appear to play a part: The correlation between voting for Obama in 2012 and voting for a tax increase in 2011 was only $\mathrm{r}=0.07$.

While we would not expect this kind of a correlation for precincts where voters are voting consistently and ideologically, it is precisely the way we would expect precincts with poorer voters who expect to benefit from national redistributive programs to vote. Voters in precincts where the average home value was greater than $\$ 200,000$, had a much more negative reaction to the tax
than voters living in precincts where the average home value was less than $\$ 200,000$. Support for the tax drops precipitously among the precincts where the people who would have to pay the most. Though the trend line turns generally positive after the huge drop in support for the tax at about \$200,000 in average precinct home value—perhaps because of a return to ideologically influenced voting ${ }^{79}$ —support for the tax by this subgroup of precincts never reaches $50 \%$.

An op-ed from the Portland Tribune confirms this analysis. Writing in 2013, columnist Darryl Swann noted that among the factors that lead to the defeat of the school tax in 2011, "[n]ot the least has been an oppressive economic climate that surely has dampened enthusiasm for any tax increase, whether it is for schools or local law enforcement in St. Helens." ${ }^{80}$

This statement is telling. In 2012, the local police department asked the voters for additional funds to restore four police officer positions cut from the force after the Great Recession began in 2008. The additional tax sought by the police department was 20 cents less per \$1,000 of assessed home value than the tax sought by the school system a year before. Unlike the schools, a police department serves everyone in a community; police staffing levels have a direct impact on community safety and, in a tax election, we might expect it to fare somewhat better that a school district that serves only a subgroup of the community. St. Helens rejected the request by a vote of $42.5 \%$ in favor and

[^48]57.4\% opposed. The chief of police chalked the defeat up to "a perfect storm" of factors that focused the attention of voters on the economy. "I'm a taxpayer too," he said. "I understand the hesitancy to commit to more taxes and say 'Yeah, charge me more,' when you have an option." ${ }^{81}$

While it is possible that the St. Helens school tax election and the police tax election turned on unique local factors, the local press coverage of both of these relatively contemporaneous elections is consistent. In both cases, the reporters agreed that economic considerations played a key role.

What the data from the St. Helens school district suggest is that, at least in this relatively well-off Democratic leaning school district without a highly educated population, the school tax elections are likely to be shaped more by economic concerns than by ideological ones. Unlike their highly educated counterparts in the Adopter districts, the voters in school districts like the St. Helens school district may not be as able to afford an ideological vote that impinges on the family budget. Instead, even though a proposed tax increase may seem relatively small, voters in the school districts resembling the St. Helens school district may choose to vote "selfishly" by rejecting the collective good in favor of the personal one.

## Conclusion

For school districts located in Democratic communities with home values is above the dataset median, there is no better predictor of a school tax election than the general level of educational attainment. A high level of educational

[^49]attainment makes it more likely that communities in these kinds of places will adopt a school tax increase; as the general level of educational attainment declines, so do the chances that the school district will get the tax increase it has requested.

A high level of educational attainment brings with it a number of demographic characteristics that make it much easier for these kinds of communities to act in accordance with what are ordinarily principles associated with Democrats. First of all, high levels of educational attainment are associated with greater wealth and higher incomes. Because of their greater wealth and higher incomes, residents of these brain hub districts have a greater capacity to bear the cost of the tax increases sought. Without this additional level of wealth, servants' quarters districts find it much more difficult to pass school tax increases.

Second, Democrats with higher educational attainment may simply see education as a good in and of itself because their personalities may make them more open to experience than are others. ${ }^{82}$ If they are relatively well off, more education or better education may be well worth a modest increase in taxes as an investment in good social policy. Without the same experience with education

[^50]that their neighbors in the brain hubs have, servants' quarters districts are less enthusiastic about providing more money to their school systems.

If people in these communities are more open to experience, then they are also probably less likely to accept, tolerate or act on racial stereotypes (Flynn, 2005). That may be why the Racial Diversity Hypothesis has no explanatory power in Googleplex districts. I have provided evidence that, at least for parents in the brain hubs, there is probably not a high degree of discomfort with rising levels of diversity in the community, and to the extent that they have chosen to move their children from public schools to private ones, the likely explanation is that they are looking for a better quality education for their children. Even though Figure 4-1 shows that in Rejecter districts, increased minority enrollment predicts an increase in private school enrollment, the predicted increase in private school enrollment is less than a full percentage point after moving from the smallest minority enrollment to the largest. This suggests that these servants' quarters areas are also highly tolerant.

The Portland and St. Helens school districts provide evidence about how political orientation, wealth and the willingness to accept a tax increase interact in these districts. In the Portland school district, presidential voting and voting on the tax increase were highly correlated and regression analysis shows that voting for Barack Obama for president was a strong predictor of the vote on the school tax. In the St. Helens school district--a less affluent community--the correlation between presidential voting and voting for a school tax increase was about half what it was in Portland. The data suggest that the reason for the difference may
boil down to economic self-interest, perhaps because the impact of an increased school tax would have a greater impact on the family budgets of the people living in school districts like the St. Helens school district than in school districts like the Portland school district.

As I discussed in Chapter 3, even though both districts have a Democratic political orientation, the school districts in the Clintonland group have a different demographic profile than the school districts in the Googleplex quadrant. In the next chapter, I examine the districts in the Clintonland group in order to explain what makes them more or less willing to adopt tax increases for the benefit of their schools.

## Appendix 4A

Alternative Specification of Table 4-1

Table 4A-1 Alternative Specification of Table 4-1

| Variable | Coefficient (std. error) | Min-Max Change in Probability of Adoption | Change in Probability from 1 Std. Dev. Below Mean to 1 Std. Dev. Above Mean | $P$ value (1-tail) |
| :---: | :---: | :---: | :---: | :---: |
| Educational Attainment | $\begin{gathered} 10.29 \\ (3.928) \\ \hline \end{gathered}$ | 0.851 | 0.522 | 0.005 |
| Homeowners | $\begin{aligned} & \hline-4.906 \\ & (3.059) \\ & \hline \end{aligned}$ | -0.431 | -0.201 | 0.055 |
| Whites | $\begin{gathered} -1.98 \\ (1.492) \end{gathered}$ | -0.236 | -0.119 | 0.093 |
| Children | $\begin{gathered} -7.025 \\ (4.365) \\ \hline \end{gathered}$ | -0.458 | -0.166 | 0.054 |
| Total Population (log) | $\begin{aligned} & -0.873 \\ & (0.651) \end{aligned}$ | -0.678 | -0.271 | 0.09 |
| Constant | $\begin{array}{r} 10.998 \\ (0.651) \\ \hline \end{array}$ |  |  |  |
| N | 54 |  |  |  |
| Pseudo R ${ }^{2}$ | . 2772 |  |  |  |
| $\mathrm{R}^{2}$ | . 3493 |  |  |  |

## Chapter 5

## Homeowners in Clintonland

If it was difficult, in the Googleplex group, for less wealthy districts that lean left politically to adopt tax increases, we ought to expect similar reluctance in Democratically oriented school districts where one of the defining characteristics is a relative lack of wealth. We have already seen some evidence of this in Chapter 3: Despite a general Democratic orientation, Clintonland school districts passed tax increases at a rate well below that of the Googleplex group, but at a much higher rate than those of the Republican districts in the typology.

Wealth, as an explanatory factor for the results of school tax elections, though, is a double-edged sword. For wealthy people, such as those in the Googleplex brain hubs, wealth allows voters a certain amount of freedom to consider the purposive benefits of a tax increase without substantial concerns about its impact on material well-being: A relatively few more tax dollars per year for voters in wealthier districts probably means much less than the feeling of having done "the right thing" for the community. For people somewhat lower on the wealth distribution pyramid, those "few extra dollars" may take an uncomfortable bite out of the monthly family budget. And finally, people with little wealth—and therefore a belief that a tax that targets real estate will not touch them directly_might perceive that a vote in favor of a new school tax will provide them, their children or people they care about with material or other benefits for which they will not have to pay, enabling them to vote in favor of a tax increase with impunity.

By definition, the Clintonland districts are places where home values are relatively low. Like almost everything else in a relatively free market, home values there depend on supply and demand. From the fact that Clintonland home values are relatively low, we can infer that these districts are not as attractive to wealthier Democratic leaning home buyers as are the homes in the Googleplex districts. If they were, we might expect home prices to rise as wealthier people bid up their prices, as they have done in places such as Portland. If it is true that the people living in the Clintonland districts are not wealthy, then we also ought to expect that when we consider tax elections in those districts, we are probably not dealing with many people who can afford to indulge ideological predilections. Instead, we are dealing with people for whom the economic impact of the tax is the primary concern.

We already know from Chapter 3 that the median level of educational attainment in the Clintonland districts is much lower than it is in the Googleplex districts, and when we couple that with the fact that these districts are also not as rich, we ought to expect that a Democratic political orientation means something different in these districts than it does in the more affluent school districts discussed in the preceding chapter. As I will show, the Clintonland districts are generally populated by downscale, moderate or even conservative Democratic voters who tend to be more comfortable with relatively conservative Democrats such as Hillary Clinton than they were with politicians who have more liberal "brands" such as Barack Obama in 2008 (though they preferred Barack Obama over John McCain in 2008 and over Mitt Romney in 2012).

Taking these considerations into account, I will argue that a general appreciation for education in these districts is not enough to win a school tax election there. Instead, with an electorate composed of homeowners, renters and poor people, economic considerations will be dominant. Ideology should not be as important in Clintonland school tax elections as it was in the Googleplex districts, and when we compare the vote for the tax, the vote for president and home values, we will find that the correlations between the school tax vote and the vote for president are much smaller than they were in the Googleplex group and not nearly as high as the correlation between the school tax vote and home values. Hard pressed, downscale districts where there are relatively more people who are likely to have to pay the additional tax directly—districts with a large number of homeowners--should be less likely to approve school tax increases than poorer districts with fewer people who are likely to believe that the additional tax will hurt them directly.

To support my argument, I first provide a general overview of the Clintonland districts, and then highlight the economic and social differences between its Adopter Districts and Rejecter Districts. I then show that the school districts in the Clintonland group that were the most likely to adopt new school taxes were poorer and had fewer homeowners than the districts that rejected them. I illustrate my argument with a profile of the Parma school district, an Ohio district that adopted a tax increase, and with a profile of the Amherst school district, an Ohio district that rejected one. Using election and home value data, I show that in contrast to the Googleplex Adopter districts, home values have a
much stronger correlation with the school tax vote than does the presidential vote. From all of this I infer that personal economic considerations and not political ideology are the best explanation of the outcomes in the Clintonland school tax elections.

## Overview of the Clintonland Districts

The less affluent Democratic Clintonland districts that adopted tax increases in 2011 are quite different from the affluent Democratic Googleplex districts discussed in Chapter 4. In addition to having far less in terms of wealth and income than the districts discussed in Chapter 4, the Clintonland districts, as a group, have somewhat more whites and homeowners than did the Googleplex districts. On average, they also have much smaller populations and much lower theoretical population densities, fewer public school students, and minority enrollments about 9 percentage points lower than those that exist in the Googleplex school districts. As noted in Chapter 3, about 59.5\% of the Clintonland districts are suburban and about 21.4\% are rural, whereas over 70\% of the districts in the Googleplex group are suburban and only about $18.5 \%$ are rural. As I will discuss in greater detail later, the Clintonland districts are the kinds of places that prefer moderate to conservative Democratic politicians such as Bill and Hillary Clinton to more liberal ones such as Barack Obama. Even though these districts prefer Democrats, the general political center-left inclination to embrace government rather than to fear it is not enough to make passing school tax increases likely.

Just as the Adopters and Rejecters in the Googleplex group are distinguishable from each other on the basis of educational attainment, the Adopters and Rejecters in the Clintonland group are distinguishable from each other on the basis of economic traits. Though the median home values of the Adopter and the Rejecter district are not statistically different from each other, Rejecter districts have about \$5,700 more, on average, in income than do the Adopters, and while that may not seem like much in absolute terms, it does amount to a statistically significant difference of about $12.1 \% .{ }^{83}$ Measured by the percentage of people in each district who live at or below the poverty level, Adopter districts are poorer by about 4 percentage points, again, a difference that does not seem very great in absolute terms but does reach statistical significance. ${ }^{84}$ It should not be surprising, then, to find that lower incomes and more poverty suggest places that also have younger populations ${ }^{85}$ and more unoccupied residential property. ${ }^{86}$

In the previous chapter, I argued that added wealth enabled voters to focus on the purposive benefits of the tax increase and not on its impact on the family budget. That is apparently not what is happening in the Clintonland districts. Here, it appears that relative affluence at the margins cuts against tax

[^51]increases while districts that are worse off economically actually seem to stand a better chance of passing them.

A moment's reflection discloses why that could be sensible. School tax increases are generally increases in the tax on real estate. Regardless of whether one owns any real estate, taxes imposed on real property owners can be passed through by landlords to their tenants in the form of higher rent; if the tenants are businesses, they can pass that additional rent along to customers in the form of higher prices. Since tax increases affect all property in a school district, there is little competitive pressure for landlords and for business tenants to absorb the tax increase. It is more sensible to pass those tax increases on to others by raising prices since, theoretically, everyone will do so and no one will suffer a competitive disadvantage.

Even though this is how the economics of a property tax work, homeowners tend to perceive such taxes as levied against them because the tax impact is direct and immediate (Berkman \& Plutzer, 2005, p. 44); renters may end up paying higher rent in the next lease year (if they have not moved to another community), but that higher rent can be perceived as part of a general escalation in prices due to inflation.

Because the impact of increased school taxes is direct and immediate, homeowners who are not affluent in absolute terms may care a lot more about increased property taxes than either their counterparts in the Brain Hubs of the Googleplex districts (who actually are affluent in absolute terms) or their rentpaying neighbors. Consistent with a version of the Homeowner Hypothesis,

Clintonland district homeowners may resist proposed tax increases because they perceive additional taxes to be unaffordable, and, depending on their financial sophistication, an unfair attempt to redistribute their meager wealth to others. On the other hand, renters, who will not feel the brunt of the tax until rents go up in the next contract year, may perceive a vote in favor of increased taxes as a consequence-free vote in support of the community or their children.

If this is what is going on in the Clintonland Districts, we should expect to find evidence of this behavior in the general-purpose logistic regression model. In fact, that is what we do find. In Table 5-1, I report the results of a logistic regression of election results in the Clintonland district on all of the same variables detailed in Chapter 3. Table $5-1$ shows that the Homeowners variable reaches statistical significance; moving from the district one standard deviation below the mean to the district one standard deviation above the mean implies a decrease in the likelihood of passing a tax increase by about 45.4\%. ${ }^{87}$

Two of the variables in the general-purpose logistic model-Homeowners and Whites-correlate strongly at $\mathrm{r}=0.75$, making the results of the model somewhat suspect due to collinearity. The Homeowner variable is also collinear with two other economic variables discussed above that distinguish Adopter districts from Rejecter districts but had to be left out of the general-purpose regression model because of concerns about statistical power and

[^52]multicollinearity. Those variables are adjusted median income ( $r=0.82$ ) and the percentage of households at or below the poverty line $(r=-0.79)$. It is not

Table 5-1 Logistic Regression Model for Clintonland Districts

| Variable | Coefficient <br> (Std. <br> Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | Palue <br> (one- <br> tailed) |
| :--- | :--- | :--- | :--- | :--- |
| Educational Attainment | -.117 <br> $(3.533)$ | 0.014 | 0.106 | 0.487 |
| Homeowners | -10.21 <br> $(2.555)$ | -0.811 | -0.67 | 0.000 |
| Whites | 5.588 <br> $(1.552)$ | 0.58 | 0.594 | 0.000 |
| Seniors | -11.245 <br> $(6.777)$ | 0.723 | -0.048 | 0.049 |
| Children 88 | 18.265 <br> $(11.654)$ | 0.88 | 0.304 | .0585 |
| Total Population (log) | -0.591 |  |  |  |
| $(0.27)$ | -0.666 | -0.282 | 0.014 |  |
| Constant | -12.419 |  |  |  |
| $(3.058)$ |  |  |  |  |
| N =42 |  |  |  |  |
| Pseudo R2 $=2872$ |  |  |  |  |

surprising that a principal components factor analysis finds that all four of these variables load heavily on a single latent factor.

To get a sense of how each of these variables works independently of the effect of the collinearity, I reran the model four times, omitting three of the collinear variables each time. ${ }^{89}$ The full models appear in Tables 5A-2 through 5-

[^53]5A-5 in the Appendix to this chapter. In Table 5-2 I report the results for only the variables of interest:

Table 5-2 Summary Logistic Regression Coefficients Without Collinearity

| Variable | Coefficient <br> (Std. Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 Std. <br> Dev. Below <br> Mean to 1 <br> Std. Dev. <br> Above Mean | P value <br> (one-tailed) |
| :--- | :---: | :---: | :---: | :---: |
| Homeowners | -4.972 <br> $(0.803)$ | -0.553 | -0.269 | 0.000 |
| Whites | 1.568 <br> $(0.633)$ | 0.25 | 0.12 | 0.007 |
| Poverty | 11.911 <br> $(3.782)$ | 0.682 | 0.36 | 0.001 |
| Median <br> Income | -0.000 | -0.837 | -0.389 | 0.001 |

Table 5-2 confirms the analysis thus far. The Homeowners variable retains statistical significance and continues to have a strong impact on the probability of passing a tax increase. Without the effects of the Homeowners variable, the Whites retains its statistical significance, but its impact on the probability of adopting a tax increase is greatly reduced and, in absolute terms, has less than half of the impact of the Homeowners variable. Though all of the variables bear the expected signs, the economic variables are the ones that make the most substantial contribution to the likelihood that a district will adopt a tax increase.

## Detailed Illustrations

## Political Orientation, Taxes and Redistribution

I have selected the Parma, Ohio school district to represent the Adopter districts in the Clintonland group because its demographics make it typical of the
other districts in this group of districts. Home values, median income, the percentage of whites, the percentage of homeowners, the percentage of college graduates and the general level of educational attainment are at about the respective means for the quadrant.

The Rejecter district I have selected, the Amherst school district, also in Ohio, is doing somewhat better economically than the Parma school district. It has higher home values, higher income, higher percentages of homeowners and college graduates and a somewhat lower percentage of people living at or below the poverty level. Both districts are working class suburban school districts in Cuyahoga County. The Parma school district is about five times larger than the Amherst district and educates about three times as many students.

Though Democratic in political orientation, as previously suggested, the Democratic voters in these places are more conservative than the voters who live in the Portland school district. In March of 2008, well before it became clear that Barack Obama would win the Democratic Party's nomination for president, Democratic voters in these two school districts were offered a choice between two versions of the Democratic Party's vision of the future in the form of Hillary Rodham Clinton and Barack Obama. Table 5-3 provides selected demographic data about national supporters of Hillary Rodham Clinton, Barack Obama, Portland school district voters, Parma school district voters, Amherst school district voters and summary statistics for the Clintonland group of school districts as a whole:

Table 5-3 Preferences for Barack Obama and Hillary Clinton in Googleplex and Clintonland

| Variable | Clinton* <br> Supporter | Obama* <br> Supporter | Parma | Amherst | Portland | Quadrant |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Income | $\$ 55,585$ | $\$ 54,056$ | $\$ 48,188$ | $\$ 64,154$ | $\$ 50,956$ | $\$ 50,144$ |
| Ideology- <br> Liberal | $22.5 \%$ | $34.78 \%$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ |
| Ideology- <br> Conservative | $42.72 \%$ | $34.2 \%$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ | $\mathrm{~N} / \mathrm{A}^{* *}$ |
| College/Grad <br> School <br> Education | $20.52 \%$ | $27.25 \%$ | $20.74 \%$ | $24.14 \%$ | $47.32 \%$ | $20.64 \%$ |
| Home <br> Ownership | $66.52 \%$ | $58.43 \%$ | $73.39 \%$ | $82.27 \%$ | $53.54 \%$ | $72.04 \%$ |
| Age >54 | $39.16 \%$ | $32.46 \%$ | $40.97 \%$ | $40.66 \%$ | $27.7 \%$ | $\mathrm{~N} / \mathrm{A}^{* *}$ |
| Age <45 | $40.71 \%$ | $45.83 \%$ | 39.38 | 36.71 | 55.72 | $\mathrm{~N} / \mathrm{A}^{* *}$ |
| Whites | $61.82 \%$ | $49.91 \%$ | 94.14 | 91.38 | 79.9 | $83.39 \%$ |
| Ap |  |  |  |  |  |  |

*A person was counted as a Clinton Supporter if, in the 2008 ANES, his or her feeling thermometer score was higher for Clinton than for Obama. **Data unavailable

## The data provided in the Clinton Supporter and Obama Supporter

 columns are based on responses from all 2008 American National Election Study respondents, unfiltered by party identification. This table shows two things of importance to the present analysis. First, it shows that the kinds of people who favored Hillary Clinton in 2008 were demographically distinct from the kinds of people who supported Barack Obama. Clinton Supporters were generally older, less likely to be college graduates, more likely to be white, more likely to be homeowners and more likely to describe their political ideology as conservative than were Obama Supporters. Second, it shows that while Portland's demographics are generally closer to the demographics of the Obama Supporters, the demographics of the Parma school district and the Amherst school district, as well as the demographics for the Clintonland quadrant as a whole, track more closely with the demographic characteristics of the Clinton Supporters than the Obama Supporters.Given the concordance of the Parma school district and the Amherst school district demographic characteristics with those of the typical ANES Clinton Supporter, it is not surprising that when given the choice between these two potential Democratic Party standard-bearers, the voters in the Parma school district and the Amherst school district chose Clinton by a wide margin. Clinton won every precinct in each school district with margins that ranged from six percentage points to almost 30 percentage points. A fair inference from all of this is that the people in these school districts (and, probably the people in the rest of the school districts in this quadrant) are largely conservative Democrats, and they probably share a number of political and economic attitudes.

While the ANES did not ask any questions relating to school taxes, it did ask a number of questions related to taxation in general. Clinton Supporters and Obama Supporters had different attitudes toward taxation. I summarize the results in Table 5-4. Clinton Supporters were less willing than Obama

Table 5-4 Tax Question Responses

| Question | Clinton <br> Supporters | Obama <br> Supporters |
| :--- | :--- | :--- |
| Favor higher gas taxes | $14.88 \%$ | $18.06 \%$ |
| Favor raising taxes to cut budget deficit | $17.07 \%$ | $27.02 \%$ |
| Agrees that government wastes a lot of tax <br> money | $74.7 \%$ | $70.72 \%$ |

Supporters to approve of higher taxes on gasoline or to increase taxes to cut the federal budget deficit. They also were more willing to agree that the federal government wastes a lot of money than to say that it only wastes some money or it does not waste very much at all. A principal components factor analysis of
these responses shows that they tap a single latent factor or underlying attitude. ${ }^{90}$ It is a fair inference that these questions are tapping an attitude about taxation because adding responses to an ANES question about trust in government to the factor analysis yields a second latent factor upon which the trust in government factor loads heavily but upon which the other variables load only marginally.

While it cannot be known how ANES respondents would have answered a question about increased school taxes, a 2010 NBC/Wall Street Journal Poll91 did ask whether respondents were willing to increase federal taxes to pay for public education; in addition, the poll used 5-point Likert scales to rate both Barack Obama and Bill Clinton. Bill Clinton and Hillary Clinton had similar feeling thermometer scores in the 2008 ANES Survey ${ }^{92}$, and so it is reasonable to assume that the respondents from the 2010 poll would have probably rated Hillary Clinton about the same way they rated Bill Clinton, particularly relative to Barack Obama. While $77 \%$ of the respondents who preferred Obama to Clinton approved of higher federal taxes for public education, only 57\% of the Clinton Supporters similarly approved.

If the Clinton Supporters in the 2010 poll hold attitudes about taxation similar to the Clinton Supporters in the 2008 poll, then it is fair to infer that people who resemble the Clinton Supporters (such as the residents of the Parma school

[^54]district and the Amherst school district) probably share the attitude expressed by the Clinton Supporters in the ANES and the NBC/Wall Street Journal poll about taxation. What is not clear is why they hold this attitude. One possibility is that, with a more conservative outlook on government, they object to higher taxes on principle. The second possibility is that they believe that they will have difficulty coping with the additional burden that higher taxes will impose on them.

One reason to accept the latter possibility and reject the former is that though they have a greater resistance to additional taxes, survey respondents did not have objections to the services additional taxes would pay for. For example, in the 2008 ANES, respondents were asked whether they would like to see various elements of social spending increased, decreased or kept about the same. Results for people who preferred Clinton to Obama, Obama to Clinton and McCain to Clinton appear in Table 5-5:

Table 5- 5 Spending Question Responses by Presidential Candidate Preference

| Question | Prefer <br> Clinton | Prefer <br> Obama | Prefer <br> McCain93 |
| :--- | :--- | :--- | :--- |
| Increase Spending on Public Schools | $52.55 \%$ | $53.27 \%$ | $45.73 \%$ |
| Increase Spending on Welfare Programs | $56.46 \%$ | $57.48 \%$ | $49.80 \%$ |
| Increase Spending on Child Care | $50.66 \%$ | $53.91 \%$ | $44.24 \%$ |
| Increase Spending on the Poor | $46.71 \%$ | $53.95 \%$ | $43.63 \%$ |
| Increase Spending on Services | $35.07 \%$ | $47.10 \%$ | $24.81 \%$ |

Though there is no way of knowing whether survey respondents actually link their views on taxation to spending, we should expect that at least some respondents do make that link, and thus, that responses to questions about

[^55]spending bear some relationship to attitudes on taxation (see Welch, 1985). ${ }^{94}$
We expect that McCain Supporters will generally be ideologically opposed to
increased levels of government spending and the taxes that go with increased
levels of spending. That is what we find. By contrast, majorities of Clinton
Supporters and Obama Supporters would be willing to spend more money on
public schools, welfare programs and childcare. ${ }^{95}$

[^56]Another reason to accept the economic explanation arises form a comparison of the election results in the Parma school district and the Amherst school district to home values using the same general procedure I used in Chapter 4. If attitudes toward taxation in general are based on ideological considerations, we should expect that voting on the school tax proposals in both jurisdictions should correlate more strongly with the vote for president than they do with home values, as was the case in Portland. On the other hand, if economic considerations were more important, we should expect that the vote on the school tax should correlate more strongly with average precinct home values. As I show below, these comparisons support the economic explanation.

## The Parma City School District

The Parma school district is a relatively large suburban school district located just south of Cleveland. It includes the City of Parma, the City of Parma Heights and the City of Seven Hills. Democratic officials govern both the City of Parma and the City of Parma Heights, while Republican officials govern the City of Seven Hills. The district has over 114,000 residents and serves over 12,000 students. It is an overwhelmingly white community where non-whites make up less than $6 \%$ of the population. Overall, the rate of homeownership in the Parma school district is close to $75 \%$. In 2011, it had 18 schools, including 12 elementary schools, three middle schools and three high schools. For the 20102011 school year, the Ohio Department of Education had rated the system as excellent.
spending without any obligation to pay additional taxes because they have no income.

Prior to the May 2011 election, the Parma school district had sought unsuccessfully to raise the school tax on seven consecutive previous occasions. The district had begun to accrue a deficit that had the potential to allow the State of Ohio to take control of the district's finances. To address those deficits, the school system had taken steps that were not popular with system stakeholders. According to the Cleveland Plain Dealer, these steps included:

- A contract imposed on unionized teachers, whose leader called the school board"tyrants";
- Cuts to teaching and other jobs;
- Requiring students to pay participation fees to participate in extracurricular activities and sports teams; and
- Cuts in classes for high-school students to state minimum standards; ${ }^{96}$

In urging his community to adopt the tax increase, former Parma school district teacher and school tax election volunteer Gerald Manganella wrote:

The real victims are the children of our Tri-City communities. Passing the levy is their only chance. There is no other option. In three years, there is an impossible $\$ 44$ million deficit barreling down on the district which has already cut $\$ 18$ million from the budget and has eliminated 200 employees. Our current course offerings are a disgrace. Middle school youngsters are spending three periods in study halls due to program cutbacks. Our senior
http://blog.cleveland.com/parmasunpost/2010/07/new_parma_schools_superinte nde.html
high students are being offered the bare course minimums and this puts them at a great disadvantage when competing with students in other school districts. Class sizes at the elementary schools will increase dramatically. ${ }^{97}$

One thing that had apparently made it difficult for the community to adopt a tax increase was that the schools and the community did not have a "good healthy relationship." ${ }^{98}$ To fix that relationship, the Parma school district hired a new superintendent in August of 2010. The Cleveland Plain Dealer gave him kudos for spending the time between August 2010 and the May 2011 election "reaching out to the community" in a bid to regain trust and credibility. ${ }^{99}$

The Parma school district sought to increase the school tax by about $16.3 \%$, resulting in an annual increase in school taxes of $\$ 212.00$ per year (\$17.67 per month) on each \$100,000 in assessed home value. Even with the additional money, the Parma school district would still face difficult choices to balance its books. Prior to the May, 2011 ballot, to save up to $\$ 2.5$ million, Superintendent Jeffrey Graham recommended that at least four of the district's 12 elementary schools be closed, that high schools add the eighth grade students currently enrolled in the district's middle schools and that fifth graders
http://blog.cleveland.com/parmasunpost/2011/04/may_3_parma_school_levy_is_ cru.html
http://blog.cleveland.com/parmasunpost/2010/07/new parma schools superinte nde.html quoting Jeffrey Graham, incoming superintendent of the PCSD.
http://www.cleveland.com/opinion/index.ssf/2011/01/a stern test for parmas sc hools.html
be added to the district's middle schools. ${ }^{100}$ In endorsing the Parma school district's funding request, the Cleveland Plain Dealer noted:

After seven straight levy defeats, the Parma schools have cut to the bone; property values will follow close behind any academic slippage for the excellent-rated district. Despite the fiscal trauma, Parma still sinks $\$ 7$ of every $\$ 10$ it spends into the classroom, an exceptionally high percentage. Its money woes have helped it focus on core operations, needed restructuring and long-term planning. But the worst may be yet to come. District officials warn that "failure to pass the levy = state of emergency." That would be a terrible blow to a distinguished inner-ring school system. ${ }^{101}$

Voters in the Parma school district narrowly approved the tax increase with a vote of 50.54 percent in favor, a margin of only 314 votes. In Figure 5-1, I plot the percentage of votes in favor of the school tax and the percentage of votes cast for Barack Obama in 2008 by precinct with precincts ordered from lowest percentage of the vote in favor of the tax increase to the highest. I also display trendlines for both elections to make the two lines more easily comparable. Unlike Portland, where the correlation between voting for Barack Obama in 2008 and voting for the tax increase in 2011 was $r=0.75$, the
correlation here is only $\mathrm{r}=0.11$. For Portland, a regression of the precinct-byprecinct vote for the school tax on the precinct-by-precinct vote for Barack

Figure 5-1 School Tax Vote and Obama Vote in Parma

## Vote for School Tax Increase in 2011 and Barack Obama in 2008



Obama yielded a prediction that each $1 \%$ increase in the percentage vote for Barack Obama would increase the percentage vote in favor of increasing the school tax by $1.25 \%$, and explained over $55 \%$ of the variation in the vote for the school tax. By contrast, for the Parma school district, a similar regression model explains only about $5 \%$ of the variation and implies only a 0.22 point increase in the percentage in favor of increasing school taxes for each $1 \%$ increase in the percentage vote for Barack Obama. ${ }^{102}$

Home values played a much more important role in this tax election. Using Cuyahoga County's property assessment records for substantially all of the homes located in the Parma school district, aggregated so as to arrive at an average precinct home value for all but the four precincts that had only rental property, the correlation between the precinct-by-precinct percentage vote in favor of the was $r=-0.27$, in absolute terms, more than twice the correlation between the precinct-by-precinct vote for Obama and precinct vote for the school tax. The result of regressing the percentage in favor of the school tax on precinct-by-precinct home values is that every $\$ 100,000$ in average precinct home value would reduce the percentage vote in favor of the tax increase by $6.9 \% .{ }^{103}$ By itself, home value explained $12.35 \%$ of the variation, more than twice as much as the presidential vote explains. When both variables are added to a single model, the presidential vote variable loses all statistical significance while the home value remains highly significant and predicts that every additional $\$ 100,000$ in home value would decrease the percentage of votes in favor of the

[^57]tax increase by $7.26 \%$, a $5.2 \%$ increase in the variable's negative impact on the school tax vote. Together, the two variables explain only $0.09 \%$ more of the variation in the school tax vote than the home value variable explains by itself. This is strong evidence that, at least for the Parma school district, economic considerations related to home values trumped ideological considerations in the 2011 school tax election.

Because the Cuyahoga County residential real estate tax assessment records did not include more than a few values for properties located in precincts dominated by rental areas such as apartment buildings and trailer parks, I excluded Parma precincts 1-G, 4-G and Parma Heights precincts B and $N$ from the regression models. Voting in favor of the tax increase in the district as a whole ranged from between $40 \%$ and $65 \%$. All of the excluded precincts cast in excess of $58 \%$ of their votes in favor of the tax; three of the four cast in excess of $63 \%$ of their votes in favor of the tax. Seven of the remaining 10 precincts that cast the greatest percentage of their votes in favor of the tax increase had mean property values of less than $\$ 100,000$ while eight of the precincts with the smallest percentage of votes in favor of the tax had home values in excess of $\$ 100,000 .{ }^{104}$ This is consistent with the idea that in less affluent Democratic communities, those voters who would be the least directly affected by a property tax increase would be the most likely to vote in favor of it and that those who would feel the pinch more directly would be the most likely to vote against it.

104 Of those, five had home values in excess of $\$ 140,000$; four of those were located in Republican dominated Seven Hills.

Much of this resistance to additional taxes, at least in the Parma school district, appears to come from senior citizens. In Ohio, the state exempts the first $\$ 25,000$ in assessed home value of disabled people and senior citizens from property tax. ${ }^{105}$ Cuyahoga County's tax records flag those properties to which the exemption applies. In a regression of the precinct percentage of the vote in favor of the tax increase on home value, the percentage of properties to which the homestead exemption applied and the percentage of Republicans in each precinct, ${ }^{106}$ only the homestead exemption variable reached statistical significance. For each additional percentage of property in the precinct subject to the homestead exemption, opposition to the school tax increased by 0.314 percentage points. ${ }^{107}$ That this opposition relates to economic matters is evidenced by the fact that the correlation between the percentage of properties in a precinct subject to the exemption and home value is relatively strong at $\mathrm{r}=0.63$.

One explanation for this pattern could be that people in the precincts that gave less than $50 \%$ of their votes to the tax increase may have seen the tax increase as an unwelcome attempt at income redistribution. In the Parma school district, as home values increased, so did opposition to Barack Obama. For the Parma school district as a whole, there is a correlation of $r=-0.56$ between home values and the percentage vote in favor of Barack Obama in the 2008 presidential election. Table 5-6 reports the results of regressing the Parma

[^58]school district's precinct-by-precinct vote for Barack Obama for president in 2008 on home value, percent of homes subject to the homestead exemption in each precinct and the percent of Republicans in each precinct, for the school district as a whole and for those precincts that approved the tax by $50 \%$ or more of the vote and precincts that failed to approve the tax by $50 \%$ of the vote. Overall, all three of the variables reach statistical significance. For the group of precincts that voted against the tax increase, home value is the only variable that reaches statistical significance. In that group the impact of home value increases by 20\% over its impact on the school district as a whole, and the model fits the data about $32 \%$ better. On the other hand, for the group of precincts that approved

Table 5-6 Regression of Vote for Obama on Home Value, Homestead Exemption and Percent Republicans

|  | Overall | $<0.50$ | $>=0.50$ |
| :--- | :--- | :--- | :--- |
| Home Value | $-0.11^{* * *}$ | $-0.132^{* * *}$ | -0.090 |
|  | $(0.037)$ | $(0.046)$ | $(0.06)$ |
| Republicans | $-0.31^{*}$ | -0.123 | $-0.624^{*}$ |
|  | $(0.179)$ | $(0.211)$ | $(0.33)$ |
| Homestead | $0.166^{*}$ | 0.077 | 0.242 |
|  | $(0.097)$ | $(0.146)$ | $(0.148)$ |
| Constant | $0.706^{* * *}$ | $0.72^{* * *}$ | $0.72^{* * *}$ |
|  | $(0.026)$ | $(0.038)$ | $(0.043)$ |
| N | 78 | 37 | 41 |
| $\mathrm{R}^{2}$ | .3599 | 0.4745 | 0.2941 |
| $\mathrm{p}<0.05^{*} \mathrm{p}<0.01^{* *} \mathrm{p}<0.005^{* * *}$ (one-tailed) |  |  |  |

the tax increase, only the percentage of Republicans in the precinct make a difference at the $\mathrm{p}<0.05$ level.

There are several inferences one might make from this analysis, but the best one is that for both votes, those precincts that voted against both the tax and Barack Obama did so because of economic concerns. Table 5-2 shows that
race does not matter nearly as much as economic considerations in Clintonland school tax elections, and there is no reason to think that wealthier voters would have been more concerned with Obama's race than poorer ones. While political orientation can be seen as having had some impact in the district at large and for the precincts that approved the tax increase, it played no role at all for the precincts that voted against Barack Obama. Instead, it makes sense to think that for the precincts that voted against the tax increase, Barack Obama, as the Democratic Party's nominee, represented the same economic threat of wealth redistribution as a tax increase would. ${ }^{108}$

## Amherst Exempted Village School District

The Amherst school district is located in the City of Amherst, Ohio, about 25 miles west of Cleveland. The City of Amherst considers itself to be "an alternative to suburban and urban living," because it retains "small town friendliness complete with commerce and industry, excellent schools, hospitals, churches, parks, service clubs and other amenities that enhance the quality of life." ${ }^{109}$ The Parma school district has a much larger population living in greater proximity than does the Amherst school district, and while the population of the Parma school district grew by 3.39\% between 2005-2009, the Amherst school district lost $5.65 \%$ of its population over the same period.

[^59]Like the Parma school district, the Amherst school district is a workingclass area. Only $24 \%$ of its population has earned a bachelor degree. Figure 5-2

Figure 5-2 Careers in Parma and Amherst
Careers in Parma and Amherst

shows the distribution of careers in both the Parma school district and the Amherst school district. For the most part, the communities have similar employment profiles, though the Parma school district has a substantially higher percentage of people involved in wholesale trade and the Amherst school district has a substantially higher percentage of people involved in manufacturing. Both districts have large percentages of people involved in education and social services. Median income and median home values in the Parma school district are about $25 \%$ and $18 \%$ lower, respectively, than they are in the Amherst school district.

The Amherst school district is much smaller than the Parma school district, and according to Table 5-2, its smaller size should have made it easier to pass a tax increase. It has only three elementary schools, a middle school, a junior high school and a high school serving together approximately 4,200 students. The Ohio Department of Education rated the district and all of its schools as "excellent," ${ }^{110}$ despite the fact that "it serves a 21 percent needy student population."111

Unlike the Parma school district, which was facing an economic crisis in 2011, the Amherst school district was facing an opportunity. In the May election,

[^60]the Amherst school district's levy sought an additional 3.95 mills ${ }^{112}$ for school operations coupled with a 2.3 mill addition for a construction bond and the continuation of a 0.5 mill permanent improvements levy. The total request, had it been adopted, would have increased taxes on a $\$ 100,000$ home by $\$ 17.22$ per month, an amount comparable to the amount sought by the Parma school district. ${ }^{113}$ Passing the tax increase would have enabled the Amherst school district to use funds supplied by others to construct a new elementary school and a recreation center for which it anticipated a need in the future. In endorsing the request, the Cleveland Plain Dealer called the plan "smart."114 Steve Sayers, Amherst school district superintendent noted that if the levy failed, he would seek the "status quo option," in which the district would be "asking for enough money to operate, but not to expand the district" in May and November of 2012. ${ }^{115}$ According to Sayers, that would cost the owners of a home valued at $\$ 100,000$ an additional $\$ 14.80$ per month instead of the $\$ 17.22$ the May levy would cost. In other words, for an additional $\$ 2.42$ per month per $\$ 100,000$ of assessed home value, not only would the school district have sufficient operating funds, but it would also get a new elementary school and a new recreation center. Sayers thought the packages could help change the district from "good" to "great" and

[^61]that the levy package would provide "tangible benefits to every resident in the Amherst Schools District." ${ }^{116}$ Further, according to Sayers:

We think this is a positive, proactive approach and we don't want to wait for things to happen and then react to them. We just feel like we have a tremendous opportunity here. . . With Metro Parks partnership, with the OSFC partnership, we can really, really position ourselves for not only the short term, but long-term success. . . . It's one of those things we believe financially makes sense in the long term. It's a community investment. . . "117

Passing the school tax would have allowed the school district to improve on its educational offerings, which had already been rated as excellent by the Ohio Department of Education. More operating revenue would have enabled the district to provide "all-day kindergarten, expanded high school electives, expanded Spanish to Nord Middle School, expanded music programs to grades five through 12," to reduce "Amherst Jr. High's pay-to-participate fee to $\$ 200$ and . . .[to reduce] instructional fees to $\$ 20$ for kindergarten through sixth grade and $\$ 30$ for seventh through eighth grades." ${ }^{118}$

The levy was defeated by a vote of $42.88 \%$ in favor and $57.12 \%$ opposed. As in the Parma school district, one possible explanation for the defeat is that voters in the district simply had a general reluctance to pay additional taxes on principle. Another possibility is that the residents of the Amherst school district,
though not necessarily opposed to all tax increases, thought the additional levy the school district proposed was too high in general. A third possibility is that while the residents were willing to fund operating costs, they did not want to build another elementary school, since the district's population had declined by over $5 \%$ over the preceding five years. A fourth possibility is that the residents of the district thought parents and not homeowners ought to bear the costs of all day kindergarten, expanded high school electives, Spanish instruction in the middle school, and instructional and pay-to-play fees.

The first possibility-that the vote tracks with political philosophy--does not seem likely. In 2008, after finishing second to Hillary Clinton during the Democratic primaries, Barack Obama won over $56 \%$ of the vote in the Amherst school district, and most of its elected officials are Democrats. It is therefore unlikely that the residents of this community hold the anti-tax views that are encompassed by orthodox Republican philosophy. The correlation, on a precinct-by-precinct basis, between voting for the tax increase and voting for Barack Obama in the 2008 general election is positive, but small at $r=0.07$. Moreover, in 2012, the school district passed a smaller tax increase by a vote of $52.28 \%$ to $47.72 \%$ in favor.

Instead, the "bread and butter" economic considerations that underlie the three other possibilities probably figured more prominently. In Figure 5-3, I plot the percentage of the precinct vote in favor of the tax increase against average precinct home values (based on Zillow "Zestimates"), with precincts arranged

Figure 5- 3 Average Precinct Home Value and Voting in Favor of School Tax Increase

## Average Precinct Home Value and <br> Voting in Favor of a School Tax Increase in 2011


from lowest average precinct home value to highest. ${ }^{119}$ With the exception of Precinct 3-A, no precinct with a mean home value less than $\$ 170,000$ had more than $45 \%$ of its voters in favor of the tax increase; the mean percentage in favor of the tax increase among these precincts was $40.63 \%$. On the other hand, all but two of the precincts with mean home values in excess of $\$ 170,000$ voted in favor of the tax increase by $45 \%$ or more, averaging, as a group 47.06\%. The correlation between average precinct home value and precinct vote in favor of the tax increase is strong at $r=0.59$, more than five times greater than the correlation between precinct vote in favor of the tax increase and precinct vote for Barack Obama. In the successful 2012 attempt to pass a tax increase, as shown in Figure 5-4, the pattern held: The correlation between home value and percent of the vote in favor of the tax increase was $r=0.6$ and the correlation between the two elections was $\mathrm{r}=0.66 .{ }^{120}$

Without individual level survey data, we cannot know exactly why this pattern exists, though we can make some reasonable guesses. Several things changed or may have changed between 2011 and 2012. First of all, the request in 2012 was smaller than it was in 2011. Second, the economy may have improved in Amherst as it did nationally, giving the Amherst school district voters confidence in their own economic prospects for the future. In this regard, whereas only about half of the precincts cast more than $50 \%$ of their votes in

[^62]Figure 5-4 Votes in Favor of School Tax Increase in 2011 and 2012

## Vote For School Tax in <br> 2011 and 2012


favor of the tax increase in 2011, all but two did in 2012. Both of these economic factors may have combined to convince voters that the additional money the school district sought would not do significant damage to their individual family budgets.

The correlation between home value and precinct vote in both years is impressive. This correlation provides strong evidence that the Homeowner Hypothesis had some explanatory power in the Amherst school district, and, presumably, in school districts like it. That the likelihood of a precinct voting in favor of a tax increase improves as the mean precinct home value increases is evidence that voters with a greater financial stake in the community in the form of home value are probably voting to protect their investments when they vote yes.

Equally impressive is the weakness of the partisan link between the two issues. In 2011, the correlation between voting for Barack Obama and the tax increase was only 0.07 and in 2012 it was -0.09 . In fact, there is reason to think that the relatively wealthier precincts that provided the most support for the tax increase in 2011 and 2012 in the Amherst school district may be Republican or conservative territory. In 2011, the correlation between mean precinct home value and voting for Barack Obama was -0.2755 and -0.3728 in 2012, meaning that just as wealthier precincts were supporting the tax increase, they were also voting against the Democratic presidential candidate.

## Conclusion

All of this confirms that in Democratic below median home value school districts like the Parma school district and the Amherst school district, regardless
of whether the district is an Adopter or a Rejecter, economic considerations apparently take center stage in school tax elections and that ideological leanings don't much matter. Thus, in the Parma school district, we saw that there was a clear split along economic lines with respect to approving a tax increase; in the Amherst school district, there was a clear pattern of support for the tax increase based on economic considerations. In neither community were the correlations between voting for the Democratic presidential candidate and in favor of a school tax increase nearly as strong as were the correlations between average precinct home values and voting for the tax increase. And in both districts, there were substantial negative correlations between home value and voting for Barack Obama. Both districts provide ample support for the idea that in these districts, and presumably those like them, economic conditions in general and the Homeowner Hypothesis in particular are better explanations for voting behavior than ideological ones.

The difference between the two districts, at least in 2011 may well have been that in the Parma school district, homeowners with higher home values may have been outvoted by renters and people who own more modestly priced homes. The percentage of homeowners in the Amherst school district is greater than it is in the Parma school district and the vote in the Amherst school district can be interpreted as an evaluation by homeowners that the level of additional taxes requested would not enhance or support their home values.

Republican districts have a different take on school tax elections than
Democratic districts have. In Chapter 6 I explore and explain this different take in below median home value Republican districts.

## APPENDIX 5A

## Alternative Specification

Table 5A- 1 Alternative Specification

| Variable | Coefficient <br> (Std. <br> Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | Palue <br> (one- <br> tailed) |
| :--- | :--- | :--- | :--- | :--- |
| Educational Attainment | 1.786 <br> $(5.356)$ | 0.198 | 0.057 | 0.370 |
| Homeowners | -16.417 <br> $(4.1436)$ | -0.916 | -0.573 | 0.000 |
| Whites | 7.951 <br> $(1.956)$ | 0.657 | 0.408 | 0.000 |
| Children | 18.265 <br> $(11.655)$ | 0.88 | 0.305 | 0.059 |
| Total Population (log) | -0.567 |  |  |  |
| $(0.295)$ | -0.626 | 0.236 | 0.028 |  |
| Constant |  |  |  |  |
| $\mathrm{N}=42$ |  |  |  |  |
| Pseudo R2 $=0.0967$ |  |  |  |  |

Table 5A- 2 Regression Model Inlcuding Homeowners Variable

| Variable | Coefficient <br> (Std. <br> Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | P value <br> (one- <br> tailed) |
| :--- | :--- | :--- | :--- | :---: |
| Educational Attainment | .392 <br> $(4.228)$ | 0.05 | 0.014 | 0.463 |
| Homeowners | -4.972 <br> $(0.803)$ | -0.553 | -0.269 | 0.000 |
| Seniors | -8.162 <br> $(5.107)$ | -0.607 | -0.200 | 0.055 |
| Children | 4.801 <br> $(6.872)$ | 0.419 | 0.095 | 0.243 |
| Total Population (log) | -0.577 |  |  |  |
| $(0.268)$ |  |  |  |  |

Table 5A- 3 Regression Model Including Percentage White Variable

| Variable | Coefficient <br> (Std. <br> Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | P value <br> (one- <br> tailed) |
| :--- | :--- | :--- | :--- | :--- |
| Educational Attainment | 1.949 <br> $(4.562)$ | 0.248 | -0.073 | 0.335 |
| Whites | 1.568 <br> $(0.633)$ | 0.25 | 0.12 | 0.007 |
| Seniors | -15.74 <br> $(5.811)$ | -0.884 | -0.366 | 0.004 |
| Children | -0.388 <br> $(9.272)$ | -0.036 | -0.008 | 0.484 |
| Total Population (log) | -0.344 | -0.475 | -0.171 | 0.111 |
| Constant | $0.281)$ |  |  |  |
| N = 42 | $(6.313)$ |  |  |  |
| Pseudo R2 $=0.0817$ |  |  |  |  |

Table 5A-4 Regression Model Including Median Income Variable

| Variable | Coefficient <br> (Std. <br> Error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | P value <br> (one- <br> tailed) |
| :--- | :--- | :---: | :--- | :---: |
| Educational Attainment | 3.793 <br> $(3.97)$ | 0.41 | -0.127 | 0.169 |
| Median Income | -0.000 <br> $(0.000)$ | -0.837 | -0.389 | 0.001 |
| Seniors | -7.756 <br> $(4.161)$ | -0.546 | 0.174 | 0.031 |
| Children | 8.392 <br> $(4.402)$ | 0.615 | 0.152 | 0.029 |
| Total Population (log) | -0.708 | -0.738 | 0.294 | 0.016 |
| Constant |  10.14 <br> $(5.616)$  |  |  |  |
| $\mathrm{N}=42$ |  |  |  |  |
| Pseudo $\mathrm{R}^{2}=0.1581$ |  |  |  |  |

Table 5A- 5 Regression Model Including Poverty Variable

| Variable | Coefficient (Std. <br> Error) | Min-Max Change in Probability of Adoption | Change in Probability from 1 Std. Dev. Below Mean to 1 Std. Dev. Above Mean | $P$ value (onetailed) |
| :---: | :---: | :---: | :---: | :---: |
| Educational Attainment | $\begin{aligned} & 1.464 \\ & (4.35) \end{aligned}$ | 0.175 | 0.051 | 0.368 |
| Poverty | $\begin{array}{r} 11.911 \\ (3.782) \\ \hline \end{array}$ | 0.682 | 0.36 | 0.001 |
| Seniors | $\begin{aligned} & -5.439 \\ & (4.426) \end{aligned}$ | -0.411 | 0.127 | 0.110 |
| Children | $\begin{aligned} & 6.415 \\ & (5.33) \\ & \hline \end{aligned}$ | 0.513 | 0.121 | 0.115 |
| Total Population (log) | $\begin{aligned} & -0.535 \\ & (0.32) \end{aligned}$ | -0.634 | 0.241 | 0.048 |
| Constant | $\begin{gathered} 2.941 \\ (3.425) \\ \hline \end{gathered}$ |  |  |  |
| $\mathrm{N}=42$ |  |  |  |  |
| Pseudo $\mathrm{R}^{2}=0.1336$ |  |  |  |  |

## Chapter 6

## Republican Headwind Over Smallville

In Chapter 3, we saw that in 2011, it was much harder to pass a school tax increase in a Republican oriented school district than in a Democratic one. As a general matter, Republicans tend to be more wary of taxes than Democrats. The 2012 Republican platform explains the wariness as follows:

Taxes, by their very nature, reduce a citizen's freedom. Their proper role in a free society should be to fund services that are essential and authorized by the Constitution, such as national security, and the care of those who cannot care for themselves. We reject the use of taxation to redistribute income, fund unnecessary or ineffective programs, or foster the crony capitalism that corrupts both politicians and corporations. ("Restoring the American Dream," 2012.)

While this formulation focuses specifically on national taxes, much of the reasoning could apply equally to local taxes. It has long been a tenet of Republican ideology that any tax reduces one's freedom because, by reducing a citizen's purchasing power, a tax reduces the citizen's ability to go out into the marketplace of life and live as he or she sees fit (see, e.g. Coolidge, 1924; Goldwater, 1960, pp. 44-5).

As a corollary, taxes also increase the ability of the government (imagined as an outside force not under democratic control) to exert control over people by reducing their resources, by creating financial disincentives for certain purchases
and behaviors, and by allowing the government to create coercive tools like armies and police forces. The most conservative Republicans oppose redistribution because it is an "objective that does violence both to the charter of the Republic and the laws of Nature" (Goldwater, 1960, p. 46) both because it depends upon discriminatory judgments favoring some groups and injuring others, (Hayek, 2009, p. 134) and because it fosters a culture of dependency where people feel entitled to "health care, to food, to housing, to you name it and [they believe that] the government should give it to them" (Mother Jones News Team, 2012 quoting Mitt Romney).

And finally, Republicans see pools of tax money entrusted to the government as an enticing incentive for corruption: For some, it is far easier to strike a deal with a politician willing to trade public resources for personal power than to compete for wealth in the marketplace. That is the essence of the Republican platform's complaint against "crony capitalism." ("Restoring the American Dream," 2012.)

These are among the reasons that the Americans For Tax Reform Pledge, pursuant to which state and national politicians promise their constituents that they will "oppose and vote against all efforts to increase taxes," finds such resonance with Republican voters. ${ }^{121}$ This general attitude creates what I shall refer to as a "Republican Headwind."

While I do not mean to imply that this attitude does not exist at all in the Googleplex group of districts I discussed in Chapter 4 or the Clintonland group of

[^63]districts I discussed in Chapter 5, it is a strong factor in the Republican oriented districts I discuss in this chapter and the next, and it must be acknowledged as a background "fact on the ground" with which school district leaders must grapple when they propose to increase the number of dollars the school system will take from district residents if a proposed tax increase passes. Because it is only a "headwind," it does not prevent districts from passing tax increases; it only makes it harder. It should be viewed as a prima facie reason that Republican oriented school districts defeated tax increases at a much higher rate than did Democratic ones.

This chapter and the next detail and explain the factors that seem to make it easier for some Republican oriented school districts to overcome the Republican Headwind and pass school tax increases. In this chapter, I focus on the Republican oriented districts with home values below the dataset median that I have called the "Smallville districts." As a matter of continuity, I first compare and contrast them with the Googleplex and Clintonland districts, taking time to show how the factors at play in those two groups of school districts may influence the districts in this group as well. At the same time, I will show that the Smallville districts are unique, responding to factors that were not important in the Googleplex and Clintonland districts. I will also identify the demographic factors that distinguish Adopter Districts from Rejecter Districts in the Smallville group of districts and show how these differences may have assisted Adopter districts in overcoming the Republican Headwind.

To do so, I use the general-purpose logistic regression model to test all of the hypotheses enumerated in Chapter 2 in the Smallville group of districts I show, first of all, that the Smallville districts are economically similar to the Clintonland districts discussed in Chapter 5, and I find that economic considerations are of great importance, just as they were in the Clintonland districts.

More importantly, though, I find that what distinguishes the Smallville group of districts from virtually all of the other districts in the dataset is the importance of community attachment to the outcome of school tax elections. As defined in Chapter 2, the Community Affinity Hypothesis holds that people who feel a strong loyalty to their communities are more likely to be willing to "give back" to them by voting for school tax increases, even though such an action would be contrary to their material self-interest. While direct evidence on this point would be ideal, public opinion data at the school district level is unavailable. Instead, I support my argument by relying on the interplay between the Total Population (log) variable and the Seniors variable.

The Seniors variable measures the percentage of households that have at least one member who is at least 60 years old. Some scholars, using demographic data about communities and/or election turnout, infer, from the percentage of seniors or households with seniors either that (i) older voters voted against a school tax measure because they saw no benefit to themselves for agreeing to higher taxes (the "Gray Peril Hypothesis"); or (ii) older voters voted in favor of a tax increase as a way of signifying their loyalty to their community and
their willingness to give back to it (the "Gray Peril Revisited Hypothesis") (Berkman \& Plutzer, 2005; Lambert et al., 2009b).

The second variable is a measure of a school district's population. We should expect a negative relationship between district population size and the likelihood of adopting a tax increase. As I noted in Chapter 3 small populations tend to encourage community engagement, help to foster positive feelings of political efficacy and are easier to mobilize than large populations.

I cannot assert that seniors in these communities are a key voting block because, for the most part, I do not have data that captures the extent to which they actually participated in their districts' school tax elections or, if they did participate, how they may have voted. Though I present case studies that address the participation of seniors in two particular school tax elections that tend to support the "Gray Peril Revisited Hypothesis," my argument is somewhat broader.

Americans are internationally and historically famous (or infamous, depending on one's point of view), for being nomadic. ${ }^{122}$ It is not unusual for Americans to spend a relatively short period of time living in one place only to pull up roots and move to someplace else if given a better job, economic circumstances change or if the neighborhood changes. A recent Pew Social and

[^64]In the United States a man builds a house in which to spend his old age, and he sells it before the roof is on; he plants a garden and lets it just as the trees are coming into bearing; he brings a field into tillage and leaves other men to gather the crops; he embraces a profession and gives it up; he settles in a place, which he soon afterwards leaves to carry his changeable longings elsewhere. (Tocqueville, 1945)

Demographic Trends survey tempers this generalization, though, by showing that the people who do tend to be nomadic and willing to move to pursue better employment opportunities are often younger and college educated, as are the people in the brain hubs of the Googleplex group (Cohn \& Morin, 2008). These kinds of people are not likely to constitute a large percentage of the residents of the Smallville group of districts, who tend to be somewhat older, less educated and more rooted.

The Pew Survey also shows that a sizable percentage of the public is significantly less mobile than the people living in the Googleplex Adopter districts. Since this group of people is not highly educated, it could be that they simply do not have good employment prospects elsewhere. The Pew Survey implies that regardless of whether this is the case, this group of people has probably made a lifestyle decision not to look for new jobs out of the area, not to "trade up" upon gaining the means to do so and not to seek other ties to other communities. According to the Pew Survey, these people say they forgo mobility because they want to be geographically close to family and current friends, they want to stay in familiar surroundings and they feel a sense of belonging to the places they have chosen to live. These people-"stayers" as the Pew Survey calls them—tend to be older, less educated, and live in small towns and rural settings. ${ }^{123}$

[^65]My argument is that the Adopter school districts in the Smallville group are more likely to have a heavy proportion of stayers, people who value stability and community over mobility and economic advancement than the Rejecter districts and that this helps to create a political environment more conducive to passing tax increases for community school systems than Republican communities without large numbers of stayers. When we encounter a small community in the Smallville group of districts with a large percentage of households with members who are at least 60 years old, we have probably encountered a community of stayers who feel loyal to the community and are willing to accept a call for higher taxes in order to support it. ${ }^{124}$

I support these claims by providing evidence that not only are the means for the Seniors variable and a variable that measure the length of time homeowners have spent living in the same homes both significantly greater in the Adopter districts than they are in the Rejecter districts (implying a larger number of stayers in the Adopter Districts), but high values for both variables significantly improve the chances that a district will adopt a tax increase; regardless of the ultimate outcome of a school tax election, both variables are positively and significantly related to the percentage of the district's votes cast in favor of the tax increase. I will also provide evidence that communities that have the largest percentage of seniors and whose populations have remained static

[^66]the longest are the districts in the Smallville group most likely to pass tax increases.

## Overview of the Smallville Districts

The Smallville districts--the dataset's smallest in terms of population, the most rural and the least educated ${ }^{125}$--evoke the fictional towns of Smallville, Kansas, where Clark Kent/Superman spent his childhood and teenage years and Mayberry, North Carolina, where Sheriff Andy Taylor kept order with his trusty deputy, Barney Fife. Figure 6-1 shows the percentage of the Smallville Districts that are located in rural areas, suburban areas, urban areas and towns.

The degree of urbanization does not appear to be a factor per se in whether a community adopted a tax increase because the percentage of Adopter districts in the group is distributed proportionately among the various locality types. ${ }^{126}$
${ }^{125}$ With a mean population size of about 15,000 people, the Smallville districts have less than half the average population size of the next lowest quadrant. Measurements of educational attainment for each group of districts are as follows:

| Group | Educational Attainment <br> Score |
| :--- | :---: |
| Googleplex | 0.567 |
| Clintonland | 0.375 |
| Smallville | 0.338 |
| Goldwater Country | 0.486 |

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| District type | Percent Adopters |
| :--- | :---: |
| Rural | 51.85 |
| Suburban | 29.63 |
| Town | 14.81 |
| Urban | 3.7 |

While the Clintonland and Smallville Districts can be distinguished from each other on the basis of locality type-the Smallville Districts are almost twice

Figure 6-1 Locale Type District Distribution

as likely to be in rural or town settings--the two groups cannot be statistically distinguished from each other on the basis of economic factors. Adjusted median home value, adjusted median income, the percentage of households living at or below the poverty level, the level of economic inequality, are about the same for both groups. This probably stems from the fact that both district groups have about the same percentage of people in "blue-collar" jobs. ${ }^{127}$ We should therefore expect that the affordability of increased school taxes would matter just as much for the Smallville districts as it did in the Clintonland districts. Instead of

[^67]the relatively strong correlation between presidential vote choice and school tax voting that we saw in the Googleplex districts, we should see a much stronger correlation between home values and school tax voting than we saw in the Clintonland districts.

The Smallville districts are, however, distinguishable from the Clintonland districts on the basis of several social characteristics. There are somewhat more children and older folks in the Smallville districts than there are in the Clintonland districts, but while those differences are statistically significant, they are less than two percentage points in both cases. The level of educational attainment in the Clintonland districts is about four percentage points higher than in the Smallville districts, but the rate of home ownership in the Smallville Districts exceeds the rate of home ownership in the Clintonland Districts by about 3.4 percentage points. In accordance with apparent Republican preferences for lower density and community homogeneity, we should expect to find that the Smallville districts have significantly fewer people, significantly smaller school systems with significantly fewer minority students, and significantly less diverse populations living on more land than in the Clintonland districts, and that is what we do find.

Adopter districts can be distinguished from Rejecter districts by population size, rates of home ownership and the percentage of households with seniors. The percentage of homeowners in the Adopter districts exceeds the percentage of homeowners in the Rejecter districts by over 3 percentage points, ${ }^{128}$ and the adjusted median home value for Adopter districts is $\$ 6,722$ higher, an amount

[^68]that just misses statistical significance. ${ }^{129}$ The Adopter districts also have about half as many people as the Rejecter districts do, ${ }^{130}$ and their school systems have, on average, about 1,161 fewer students. ${ }^{131}$ The percentage of households with seniors in the Adopter districts exceeds the percentage of households with seniors in the Rejecter districts by about 4 percentage points. ${ }^{132}$

While there are no differences in educational attainment between Adopter and Rejecter districts, and, consequently no major differences in the distribution of white-collar and blue-collar jobs between Adopter and Rejecter districts that can generally explain the differences in wealth between the two groups, people in the Adopter districts seem to be somewhat further along in life than the people in the Rejecter districts. In the average Adopter district, the median age is more than two years greater than it is in the Rejecter districts, ${ }^{133}$ median homeowner tenure in the same home is about a year longer ${ }^{134}$ and the percentage of households with school-age children is smaller than in the Rejecter districts by about two percentage points. ${ }^{135}$

To determine which of these economic or demographic characteristics had any actual impact on the outcome of the various school tax elections, I begin with the general-purpose logistic regression model. Since I argue that the Community Affinity Hypothesis has a lot of explanatory power in the Smallville quadrant, I am

[^69]looking for significant coefficients and high probabilities on the population size variable. And, since I have also argued that the presence of a large percentage of households with seniors signifies a school district where people have longstanding ties to the community, I am also looking for a significant coefficient and high probabilities of passage on the Seniors variable. A significant coefficient for the Seniors variable cannot tell us what senior citizens thought about a tax increase or how they voted (if they did) when the question was presented to them on a ballot. What it can tell us, though, is something about the character of the community itself.

The basic premise of the Gray Peril Hypothesis is that seniors prefer to avoid paying for services from which they do not generally benefit and that they will choose to live in communities that minimize the likelihood that they will be subjected to such a tax. A significant negative coefficient will suggest that Smallville seniors have chosen to live in communities that protect their immediate economic interests. This will, in turn, suggest that Smallville seniors value individual interests above communal ones, perhaps because the people living in such communities are not very attached to those communities (Berkman \& Plutzer, 2005; Wong, 2010). On the other hand, a significant positive coefficient on the variable will suggest that, with respect to the Smallville districts, seniors have chosen to live in places where the residents make a greater allowance for the communal good over that of the individual and that they are places where people have a greater connection to the community.

Results from the general-purpose logistic regression model testing these hypotheses appear in Table 6-1. These results generally confirm my

Table 6-1 Logistic Regression Model for Smallville Districts

| Variable | Coefficient <br> (Std. Error) | Min-Max <br> Change in <br> Probability <br> of Adoption | Change in <br> Probability <br> from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | P value <br> (one- <br> tailed) |
| :--- | :---: | :---: | :---: | :---: |
| Educational Attainment | 8.341 <br> $(4.517)$ | 0.703 | 0.191 | 0.033 |
| Homeowners | 3.461 <br> $(5.094)$ | 0.326 | 0.111 | 0.249 |
| White | 2.77 <br> $(3.578)$ | 0.284 | 0.091 | 0.420 |
| Seniors | 9.454 <br> $(3.642)$ | 0.608 | 0.242 | 0.005 |
| Children ${ }^{136}$ | -8.761 <br> $(8.075)$ | -0.568 | -0.168 | 0.139 |
| Total Population (log) | -0.74 <br> $(0.342)$ | -0.754 | -0.316 | 0.016 |
| Constant | -5.293 <br> $(6.204)$ |  |  |  |
| N | 74 |  |  |  |
| Pseudo R ${ }^{2}$ | 0.1709 |  |  |  |

expectations. ${ }^{137}$ That the Seniors variable is significant and positive tells us that for this quadrant, the Gray Peril Revisited Hypothesis is likely to be in play since

[^70]a relatively high percentage of households with seniors as members makes it 24.2\% more likely that the district will pass a tax increase, considering values for one standard deviation above and below the mean for the group. ${ }^{138}$ The fact that the Total Population (log) variable is negative and significant supports my claim that the Community Affinity Hypothesis has come into play: Moving from the district with a population size one standard deviation below the group mean to the district one standard deviation above the mean of the variable decreases the likelihood that a tax increase will be adopted by $31.6 \% .^{139140}$

## A Closer Look at the Districts That Attract and Retain Seniors

According to the model, the size of the community and the percentage of households with members who are at least 60 years old appear to be bellwethers of Smallville school districts likely to adopt tax increases. As I have previously pointed out, the coefficient on the Seniors variable is positive, indicating that as the percentage of households with members at least 60 years old increases, so
${ }^{137}$ The results also include a surprise. According to the model, increasing levels of education also seem to make a difference. This result is difficult to explain in light of the fact that the Smallville group of districts has the lowest mean percentage of college graduates and the lowest mean score for educational attainment. Adopter districts are statistically indistinguishable from Rejecter districts in their levels of educational attainment and their percentages of college graduates.
${ }^{138}$ Using the entire range of the variable, it becomes $60.8 \%$ more likely to pass a tax increase.
${ }^{139}$ Using the entire range of the variable, it becomes $75.4 \%$ less likely for the district with the largest population to pass a tax increase than the district with the smallest population.
${ }^{140}$ While there is no statistically significant interaction between the Total Population (log) variable and the Seniors variable, $57.9 \%$ of the school districts that had below median population sizes and above median percentages of households with seniors adopted tax increases. By contrast, only $15.9 \%$ of the school districts with above median populations and below median percentages of households with seniors did the same.
does the likelihood that a district will adopt a tax increase. So dramatic is this effect that in the Smallville Districts (but not elsewhere), the percentage of households with seniors is actually a highly significant predictor of the vote, explaining, by itself $11.64 \%$ of the variation. ${ }^{141}$

The Gray Peril Revisited Hypothesis tells us that this might happen for two general reasons: Communities that attract and/or retain high percentages of households with seniors are either keenly interested in protecting home equity or else the presence of large percentages of households with seniors marks the district as the kind of place where loyalty to the community moderates selfinterest to a considerable extent.

We ought to be skeptical of the first possibility. If the seniors themselves were making the difference, first of all, we should expect that in addition to having a greater percentage of households with seniors than do the Rejecter districts, we should find that Adopter districts have larger percentages of homeowners who are seniors. This is not the case. The percentage of seniors who own homes in Adopter districts is no greater than the percentage of seniors who own homes in the Rejecter districts, ${ }^{142}$ and the homeownership rate is less strongly correlated with the percentage of households with seniors than anywhere else in the typology. ${ }^{143}$ We therefore cannot say either that the seniors who live in the

[^71]Smallville districts are likely to have accumulated much wealth and invested it in their homes or that they have systematically chosen to live in school districts that are scrupulous about protecting home equity by investing additional money in their school systems.

Given the likelihood that seniors in these districts probably do not have much home equity to protect, it is more reasonable to think that they are probably more concerned about day-to-day expenses than in the returns on home equity. In fact, every 1 percentage point increase in the percentage of households with seniors in the Smallville Districts (but not elsewhere in the typology) reduces adjusted median income there by almost $\$ 41,000,{ }^{144}$ leading to the conclusion that districts with large percentages of households with seniors are poorer than districts where there are fewer such households and are less able to afford tax increases.

Despite this, though, it could be that the people who live in the Smallville Adopter districts are interested in protecting what little equity they do have in their homes. We might be able to find evidence of this if we observe that the school systems in Adopter districts are significantly better or significantly worse than the school districts in the Rejecter districts. If the schools are materially better in the Adopter districts than they are in the Rejecter districts, we could infer that this

| a. Googleplex | (Quadrant 1) | $\mathrm{r}=0.55$ |
| :--- | ---: | ---: |
| b. Clintonland | (Quadrant 2) | $\mathrm{r}=0.53$ |
| c. Smallville | (Quadrant 3) | $\mathrm{r}=0.19$ |
| d. Goldwater Country (Quadrant 4) | $\mathrm{r}=0.35$ |  |

${ }^{144}$ This is the result of regressing adjusted median income on Seniors. The equation yields an $R^{2}$ of 0.0718 and a $p$ value for the coefficient of 0.011 (onetailed).
difference flows from votes in favor of school tax increases that protect home equity by keeping school district quality high, thus preserving a home price advantage ${ }^{145}$ over other Smallville districts. ${ }^{146}$ If the schools are of materially worse quality in the Adopter districts than they are in the Rejecter districts, we could infer that voters are reacting to a perceived problem that might make it harder for them to realize any gains in their home equity. Using a measure of school district quality provided by the George W. Bush Institute ${ }^{147}$ discloses that there is no statistical difference in the quality of school districts, and so while it is possible that these households are voting to protect or improve home equity, there is no evidence to support such an inference. ${ }^{148}$

Given available data, it makes more sense to think that the second rationale for the Gray Peril Revisited Hypothesis is the better explanation for the influence of households with seniors in the Smallville districts. As I have previously noted, though the percentage of seniors who own homes is about the

[^72]same in both Adopter and Rejecter districts, the overall percentage of households with seniors is a significant 4\% higher in the Adopter districts than it is in the Rejecter districts. As I have also previously noted, Adopter districts have a significantly greater percentage of homeowners. While homeownership can be an economic variable that affects the likelihood of adopting an increased school tax, we ought to expect that in below average home value communities, high levels of homeownership should make it less likely that a district will adopt a tax increase. Though everyone is affected by an increased real estate tax as it ripples through a community, homeowners are the most directly affected and are generally the first to feel its effects. This is exactly what happened in the economically comparable Clintonland districts: School districts with high percentages of homeowners were less likely to support tax increases for the school district.

According to Table 6-1, though, in the Smallville Districts, homeownership in and of itself does not have any substantial impact at all on the outcome of school tax elections. It does, however have an impact on the percentage of households with seniors. Regressing the percentage of households with seniors on the percentage of homeowners results in almost a 12 percentage point increase in the percentage of households with seniors for every 1 percentage point increase in the percentage of homeowners.

The reason for this does not appear to be that the ranks of homeowners in the Smallville districts are occupied by households with seniors. If there were a disproportionate percentage of households with seniors in the Smallville districts,
we would expect that the two variables would be strongly correlated and the regression equation should explain a large portion of the variation. Instead the correlation between the two variables and the $R^{2}$ value for the regression equation are both low in comparison to the comparable ones for the other three quadrants reported below in Table 6-2.

Table 6-2 Correlations Between Households With Seniors and Homeowners Who are Seniors

|  | $\mathbf{r}$ | $\mathbf{R}^{\mathbf{2}}$ | Coefficient |
| :--- | :---: | :---: | :---: |
| Googleplex | 0.55 | 0.3019 | 0.3248 |
| Clintonland | 0.53 | 0.2768 | 0.2019 |
| Smallville | 0.19 | 0.0348 | 0.1181 |
| Goldwater Country | 0.35 | 0.1236 | 0.2863 |

These low values suggest that in the Smallville districts, the percentage of households with seniors increases with increased percentages of homeowners not because the percentage of senior homeowners increases, but because of some other factor.

The fairest inference about what that other factor might be is the same one that Wong and Berkman and Plutzer draw: Homeownership is an indicator of attachment to community. According to Wong,

People's sense of community tends to grow with age and with ties in an area, either through home ownership or length of residence. And, overall, these feelings of community are related to greater political trust, efficacy, the willingness to tax oneself, and civic participation. (Wong, 2010, p. 108)

For the Smallville group of districts, the suggestion is that the Adopter districts have more households with seniors because seniors prefer to live in communities where the bonds of community are tighter.

If this is so, then in addition to partisan and economic factors, community attachment is an important factor in explaining why relatively small Smallville school districts with high percentages of households with seniors are the most likely to pass school tax increases. Even though there may be a Republican Headwind, community attachment in these communities is sometimes sufficient to withstand and overcome it.

We have already seen that there are significantly more households with seniors in the Adopter districts and that the Adopter district populations, on average, are significantly older, ${ }^{149}$ have significantly more homeowners ${ }^{150}$ and have lived in their homes for a significantly longer period of time. ${ }^{151}$ While home ownership and the presence of households with seniors have only a small correlation-in a principal components analysis, home ownership is an economic factor that loads with measures of income-the variable that measures the median tenure of homeowners in a school district ("Tenure") and the Seniors variables load heavily on the same factor and they correlate strongly at $\mathrm{r}=0.58$ overall, $r=0.70$ in Adopter districts but only at $r=0.40$ in the Rejecter districts. It is therefore not surprising that they exert a strong influence on each other. ${ }^{152}$
${ }^{149}$ The mean age in Adopter districts is 2.4 years greater than in Rejecter districts with $p=0.007$ (one-tailed).
150 The mean percentage of homeowners in the Adopter districts is 3.1 percentage points higher than in the Rejecter districts with $p=0.035$.
${ }^{151}$ Homeowners have owned their homes, on average, for almost 1 year longer than than have the homeowners in the Rejecter districts, with $\mathrm{p}=0.034$.
${ }^{152}$ While I found no formal interaction between the Tenure and Seniors variables, $44.4 \%$ of the Smallville districts that passed tax increases had above quadrant median levels of households with seniors and years of tenure in the same home. No other combination of these two variables had a passage rate in excess of 18.5\%.

In the Smallville Districts, a regression of Seniors on the Tenure variable suggests that each year of tenure in the same house increases the percentage of households with seniors in the district by 0.0119 percentage points. The result is highly significant, ${ }^{153}$ and, by itself, median home tenure explains $34.2 \%$ of the variation in the percentage of households with seniors living in the school districts. In separate regression equations for Adopter districts and Rejecter districts we find
a. In Adopter districts, each one year increase in tenure implies a 0.013 percentage point increase in the percentage of households with seniors, with a p value for the coefficient of 0.001 (one-tailed), explaining, by itself, $49.3 \%$ of the variation in the percentage of district households with seniors; and
b. In Rejecter districts, each one year increase in tenure implies a 0.008 increase in the percentage of households with seniors, with a $p$ value of 0.008 (one-tailed), explaining, by itself, $16.2 \%$ of the variation in the percentage of district households with seniors.

This is precisely what we would expect to find if attachment to community is particularly attractive to seniors who want to live in Smallville type school districts. Stable communities where people have lived in their homes longer tend to have more households with seniors. This stability is so important that it accounts for almost half of the variation in the percentage of households with seniors in those districts. While the absolute differences between Adopter and

Rejecter districts in Tenure- $0.979^{154}$ years when only homeowners are considered or $1.54{ }^{155}$ years when both renters and owners are considered--are modest, regressing the percentage of the vote in favor of a tax increase on the median tenure of all Smallville school district residents yields a statistically significant ${ }^{156}$ result implying a 0.016 point increase in the percentage of votes in favor of a tax increase for every additional year of tenure, explaining $11.3 \%$ of the total variation. A logistic regression of election outcomes on median tenure of all school district residents suggests that moving from the fifth percentile (seven years) to the $95^{\text {th }}$ percentile (16 years) improves the chances of passage by over $43 \%$. ${ }^{157}$ Even a small change such as moving from the median (11 years) to the $75^{\text {th }}$ percentile ( 13 years) improves the chances of passage by over $9 \%$. In low turnout elections like these, where the median number of votes cast in the Smallville districts was only 2,034 , those additional months of tenure may mean the difference between adoption and rejection.

It is fair to infer from all of this that there is more to the Smallville group of districts than a basic concern for tax affordability. More households with seniors in a district improve the chances that the district will be able to pass a tax increase, but the presence of high percentages of those households depends, in part, on the presence of a stable long-standing community. A community with a high percentage of households with seniors signals a community without much

[^73]turnover where "everybody knows your name." The deep community roots that tend to appear in long-standing communities influence not just the voting patterns of seniors, but of everyone there. Community attachment helps to counter the Republican Headwind that blows across the Smallville districts.

I turn now to two illustrative cases of Smallville group communities: the Advance R-IV School District (the "Advance school district ") located primarily in Stoddard County, Missouri and the Fairborn school district (the "Fairborn school district") located mostly in Greene County, Ohio.

Detailed Illustrations
Advance R-IV School District, Missouri
The Advance school district is a small rural school district. It has a population of about 3,200 people spread over about 88.5 square miles. It has the $13^{\text {th }}$ smallest population in the Smallville district group. It also has, with respect to the Smallville districts, the fourth highest median age, the third highest percentage of households with members who were at least 60 years old and only the ninth highest percentage of residents living at or below the poverty level. The Advance school district had no residential turnover during the year prior to the year ACS surveyed the community. Median tenure in the Advance school district was about 13 years for owners and 10 years for all residents. These factors are typical of the Adopter districts and are, no doubt, the reason the general-purpose logistic regression model predicted that the Advance school district would be among the Smallville school districts most likely to adopt a tax increase.

The Advance school district is a relatively well-managed school district of which, according to Madeline DeJournett, ${ }^{158}$ a long-standing school district resident, former teacher and reporter for the Dexter Daily Statesman, Advance's community newspaper, the people in the community are "very supportive." The Advance school district has an elementary/middle school serving about 240 students and a high school serving about 200 students. For its academic quality, it rates about in the middle of the Missouri school districts that considered tax increases in 2011. It spends about $\$ 6,531$ per student, which, according to Superintendent Stan Seiler, is the second lowest amount for the group of 21 neighboring school districts. Speaking of his predecessor, Superintendent Seiler remarked that "Superintendent Mike Redman was probably one of the best financial managers in the state. . . .He was extremely frugal in managing the schools' budget." ${ }^{159}$

Like so many other school districts in 2011, the Advance school district was facing a cash shortfall because of cuts in federal and state funding that were not likely to be made up in the future. According to district Superintendent Seiler, "We've been told that the shortfalls in state funding will only worsen in the future." ${ }^{160}$ Prior to asking the community to increase the existing levy by about $\$ 47.50$ per year for homes valued at $\$ 100,000$ and about $\$ 30.00$ per year per $\$ 100,000$ in assessed value for farmland, the school district made a number of cuts, including eliminating a school bus route, taking steps to become more

[^74]energy efficient, reducing field trips for students and eliminating two teaching positions. The tax increase requested sought to raise about $\$ 72,000$ per year, allowing the school district to "retain qualified staff, maintain [its] facilities and meet the operating expenses of the district." ${ }^{161}$

The Advance school district is located in a solidly Republican area. In 2012, it cast about 79\% of its votes for the Republican presidential ticket. A comparison of the demographic characteristics of the district's main population centers with the demographic characteristics of outlying areas disclosed no major differences in income, median age, racial characteristics or educational attainment, except that the main population center in the City of Advance has about $4 \%$ more seniors than the percentage of seniors in the district as a whole. There is little reason, therefore to think that any part of the school district differs systematically with respect to political orientation from any other part of the school district. According to DeJournett, there is not much political dissent in the Advance school district. "If there are those of us who disagree," she wrote, "we keep our mouths shut and work from the sidelines." Given the small-government platform of the Republican Party in 2012, which included planks calling for low taxes and low government spending, and the margin of victory the ticket enjoyed in the Advance school district over the Democratic ticket, it is fair to assume that Advance school district residents probably initially brought, on general principles, a healthy resistance to additional taxation to the table, creating a Republican Headwind for school tax supporters to overcome.

161 Ibid.

As in the recent past, according to DeJournett, community leaders, including the owners of the Bank of Advance, ${ }^{162}$ organized a community team to spearhead the drive for passage. "The influential cadre of leaders was educated to go out and answer the questions that the community would ask," said DeJournett. According to DeJournett's article in the Dexter Daily Statesman, by at least five weeks before the election, "supporters . . . [were] mobilizing for a registration drive for new voters and a fundraising program to pay for advertising." ${ }^{163}$ In particular, the Dexter Daily Statesman article notes that one group specifically targeted was senior citizens.

DeJournett says that tax supporters worked hard to get the support of the district's seniors.

In all three issues that l've been a part of, specific seniors, known to be supportive, were specifically contacted to be a part of the tax study. Mr. Stan Seiler, the current superintendent, went to specific groups to speak on the issue. Advance doesn't have many civic organizations anymore, but he hit the Senior Nutrition Center, the library board, and several church groups. Even now, long after the issue passed, he makes a point to come occasionally and eat a meal with the seniors on Fridays at the senior center.

[^75]To win voters over, DeJournett says tax increase proponents stressed two things. First, many senior citizens were concerned about the physical condition of the elementary school, because many of them had grandchildren who attended it. Second, they "appealed to their civic pride. . . When a project becomes a 'patriotic duty,' the opponents seldom have the courage to challenge it." Said DeJournett, "Most small town residents see what has happened to their communities. . . . when they lost their schools. They know that if the school goes, the community dies-and no one is ready to give up on Advance."

Voters in the Advance school district approved the tax increase by a vote of $66.41 \%$ in favor, which is about 4 percentage points higher than both the mean and median for the Smallville districts that approved tax increases and about 6 percentage points higher than all of the districts in the dataset approving tax increases. Part of what made the tax proponents in the Advance school district so successful in overcoming the Republican Headwind was that, given the fact that many of the voters had deep roots in this highly stable and racially homogeneous community, they were able to succeed in transforming the debate about the tax from a debate about pure economic self-interest and political ideology into a way of affirming an attachment to the community. Said DeJournett:

The identity of the town is wrapped up in the success of the school and the ball teams. What else do we have? All our factories are gone. In the 1970s and early 80s Advance had a shoe factory that employed 600 people. Hard to imagine that now. Our last factory left for Cape

Girardeau (Missouri) about 4-5 years ago. The rest went to Mexico. . . . Are small towns doomed to become 'bedroom communities,' relying on the commute to larger cities? . . [ [l]f we lose our school, we lose ourselves.

## Fairborn City School District, Ohio

The Fairborn school district is an order of magnitude bigger than the Advance school district. Located mostly in Greene County, Ohio, with small swatches in Montgomery and Clark Counties in southwestern Ohio, this suburban district has a population of over 42,000 people with four schools serving about 4,500 children. The district is located between Springfield to the northeast and Dayton to the southwest. It includes the Wright-Patterson Air Force Base and Wright State University.

In its promotional video, "Fairborn, a Great Place to Live," ${ }^{164}$ Fairborn touts itself as being diverse. In fact, the school district is $83.5 \%$ white and $9.55 \%$ African-American with the remaining 7\% of its population made up of Hispanics, Asians and people of mixed ancestry. It is unclear what percentage of the nonwhite population consists of people assigned to the Air Force base or students attending the university. $87.3 \%$ of the students enrolled in the school system are white. Of all of the Smallville districts, Fairborn has the $7^{\text {th }}$ lowest percentage of whites in its population.

Perhaps attributable to the presence of the university and the Air Force base, Fairborn school district's age distribution skews extraordinarily low at 29.8 years (the median for the dataset is 40 and for all of the districts in the Smallville

164 http://www.youtube.com/watch?v=jT1H6kqIW2A\&list=UUXawYpFdSUGLZ-TBBW-r5_g\&index=30
group of districts, it about is 39.7), and the percentage of households with people at least 60 years old is only about $25.9 \%$ (by comparison, the median for the dataset is $34.1 \%$ and for the Smallville group of districts, it is $35.4 \%$ ). Only $51.83 \%$ of the residents in the school district own their homes (by comparison the median for the dataset is $77.9 \%$ and for the Smallville districts, the median is $76.6 \%$ ). The median amount of time Fairborn school district homeowners have lived in the same home is 13 years, which is the same as it was in the Advance school district, but median tenure for all residents, including renters, is only five years in the Fairborn school district compared to 10 years in the Advance school district. Unlike the Advance school district where no one had moved in the year preceding the one in which the ACS survey was conducted, a third of the Fairborn school district's residents were new in the year ACS surveyed it.

Speakers in Fairborn's promotional video praise the town for its quality of life and sense of community. "Fairborn is the quintessential little town," said one speaker, "It's small enough and homey enough that you can know your neighbors." Said another "If you could look at a traditional Norman Rockwell town, housing, culture, the city government, the fire and police . . . Fairborn fits that picture." "Our community bands together to support everything within this city from the July $3^{\text {rd }}$ block party, the $4^{\text {th }}$ of July parade, all the other events, the heritage days. It has a true sense of community."

In 2011, though, this "true sense of community" was not strong enough to overcome the Republican Headwind so as to enable the Fairborn school district to pass a higher school tax. Despite the fact that since 2003, it had cut 74
teachers, 10 administrators, 55 classified employees and 40 extra-curricular positions, the Fairborn school district was facing a financial emergency. According to a Power Point presentation prepared by Put Fairborn Kids First, the group spearheading the drive for a school tax hike, ${ }^{165}$ the district's cash reserves would be depleted by November, 2011 unless the voters agreed to a tax increase costing homeowners about $\$ 19.70$ per month for each $\$ 100,000$ in assessed home value. Failing to agree to a tax increase would result in cuts in busing and a reduction in or elimination of club activities, the high school marching band, extra-curricular sports for high school and middle school students, guidance counselors at the elementary schools and advanced placement courses for high school students.

The tax increase was solidly defeated by a vote of only $36 \%$ in favor and $64 \%$ opposed. "We're a victim of the economy," said Fairborn school district Superintendent Dave Scarberry. "Overall, people support public education and support education as a whole, but right now they don't have their own personal finances to be able to do that."166

A comparison of the precinct-by-precint vote with average precinct home values, ${ }^{167}$ as depicted in Figure 6-2, yields a moderate correlation of $r=0.29$. This confirms the Superintendent's claim that economic considerations played a part in the defeat of the school tax. It should be noted that the correlation here is

[^76]
## Vote In Favor of School Tax Increase by Ascending Average Home Value


positive, meaning that the percentage of people in a precinct willing to vote for a tax increase increases as the average home value in the precinct increases. We can gather from this that wealthier precincts were relatively more willing to support the tax increases than poorer ones. Regardless of that correlation, though, only one precinct-the precinct that includes the Air Force base-cast a majority of its votes in favor of the tax increase. ${ }^{168}$

Yet, economics is not the whole story. First, though Fairborn voters were confident enough in the economy to renew an existing school tax in 2012, they refused to increase the tax on three separate occasions between May of 2011 and 2013. If they really did not "have their own personal finances to be able to do that" as the Superintendent argued, one might think that voters would refrain from voting to renew the tax in order to save on their property tax bills.

We can probably rule out ideology here as well. If ideology (beyond the Republican Headwind) had been important in Fairborn, we might expect the kind of strong positive correlation between the school tax vote and the presidential election that we saw in the Portland, or even the St. Helens school districts. Instead we see an extremely weak negative correlation of $r=-0.08^{169}$ overall. Having large percentages of registered Democrats in a precinct, surprisingly, was of little assistance in getting the tax increase passed. In the Fairborn school district, there was a strong negative correlation ( $r=-.60$ ) between a precinct's

[^77]percentage vote in favor of the tax increase and the percentage of the precinct's registered Democrats who participated on Election Day. Perhaps these voters were affected by the same kinds of considerations that moved their co-partisans in the Clintonland districts: There is a moderate negative correlation ( $r=-0.31$ ) between average home values in a precinct and the percentage of people who participated in the election as registered Democrats.

An analysis of the current Greene County voter roll shows that a large part of the story was probably a tacit conflict between the district's "old timers" and its more transient population. Greene County maintains highly detailed records about its voters and their voting habits. ${ }^{170}$ We can infer the fact that there is an "old timers" population that is politically distinct from a much larger "transients" population in Fairborn by comparing demographic data and voting habit data about the people who voted in the school tax election and the presidential election.

From the voting roll, we can determine, first of all, the average age of the people who voted in each election. Second, since the voting roll tells us when the voter registered to vote in Fairborn, we can get a fair idea, for each election,
${ }^{170}$ The voter roll can only give us a general idea of what happened because (i) the voter roll is current as of 2014, and so voters who were registered to vote as of the 2011 election date but are no longer registered to vote (because of death or relocation) are not on the list; (ii) since there were other questions on the ballot, we cannot know whether a voter actually cast a vote in the school tax election; (iii) the roll does not disclose how any particular voter voted; and (iv) since Ohio is an open primary state, many voters register as independents even though they may consistently vote for one party or the other. We can have at least some confidence in our conclusions, though, because an analysis of voter turnout in Fairborn shows a consistent pattern of participation within each precinct.
of how long each voter who participated has lived in Fairborn. ${ }^{171}$ Third, we can determine the political orientations of the voters in each election. The results of that analysis appear below as Table 6-3:

Table 6-3 School Tax and Presidential Electorate in Fairborn

| Trait | School Tax Election | Presidential Election |
| :--- | :---: | :---: |
| Average Age in Years | 57.72 | 47.12 |
| Years Registered | 23.05 | 14.10 |
| \% Republican Turnout | $53.19^{172}$ | $27.19^{173}$ |

While the fact that the people who turned out to vote in the school tax election were older, more settled and more Republican than the people who turned out to vote in the presidential election is not surprising, what is notable is the how different the electorates were. Aside the huge partisan difference between the two groups-the voting share of Republicans for the school tax election is double what it was in the presidential election--the school tax electorate was $22.5 \%$ older and had lived in Fairborn over $63 \%$ longer than the presidential electorate. The percentage share of the vote contributed by each precinct in the school tax election has only a modest correlation with the percentage vote share of the vote contributed in the presidential election at $r=0.31$. This modest correlation confirms the fact that the participation, by precinct, in the school tax election was not highly proportional to participation, by precinct, in the presidential election.

[^78]Further analysis of the voter roll discloses that in the school tax election, people over 60 years of age accounted for about $45 \%$ of all voters; in the presidential election, they accounted for only $28.5 \%$ of the voters. Regressing the percentage of the vote in favor of the school tax on average precinct age, average precinct years registered to vote and precinct percentage of the population over 60 in three separate equations yields the results contained in Table 6-4:

Table 6-4 Regression of School Tax Vote on Average Age, Tenure and Percent Over 60 years old

| Variable | Coefficient | p value (one- <br> tailed) | Equation <br> $\mathrm{R}^{2}$ |
| :--- | :---: | :---: | :---: |
| Average Age | -0.008 | 0.021 | 0.1394 |
| Average Years Registered | -0.01 | 0.006 | 0.2105 |
| Percentage of People 60 and <br> older | -0.007 | 0.017 | 0.1512 |

From the results reported in the last two paragraphs, a fair observation is that older voters with relatively long roots in the community had a negative impact on the school tax vote. While it may seem to contradict the argument I have made in this chapter about the importance of community attachment to the success or failure of a school tax vote in Smallville group communities, a moment's reflection reveals that instead, Fairborn's voting behavior actually confirms it.

My argument concerns the characteristics of communities, not how particular individuals will vote on any particular proposal. I assert that communities where there is a high degree of community attachment as evidenced by small population size and the presence of a large percentage of households with people who are at least 60 years old should be the most likely to
adopt school tax increases. I do not claim that older people who have lived in a place for an extended period should be the most likely people to vote in favor of a school tax increase.

To understand why Fairborn's voting behavior supports my theory, it is important to remember how I defined the word "community" in Chapter 2. "Community" is about the relationships people have with other people and though those relationships may be limited to people living in a particular place, a geographical component is not required for a community to exist. The members of one's "community" are the people with whom one shares as sense of similarity, belonging or fellowship (Wong, 2010, p 6).

Recall, now, that Fairborn is among the largest school districts in the Smallville group and that it is a highly transient place with the average resident having tenure in the same house of only about five years. The percentage of people who have made a financial commitment to Fairborn by purchasing homes there is almost 10 percentage points lower than the median for both the dataset and the quadrant. The size of its minority population is almost equal to that of the mean for the Clintonland group, which is about 10 percentage points higher than the mean for the Smallville group. In addition to its racial diversity, its large population size signals that it is probably more economically and culturally mixed than is normal for Smallville districts.

In short, this is not a place like Missouri's relatively small and homogeneous Advance School district where there had been no residential turnover in the year before the ACS survey. While every community has its
share of "stayers"-and Fairborn is obviously no exception--it is not likely that a place the size of Fairborn, with its Air Force base and its university is the kind of place that attracts people looking to put down deep roots. That is probably why it has one of the lowest percentages of households with seniors in the Smallville group of districts

With the records we have, it is impossible to know exactly how anyone in Fairborn voted on the school tax or in any other election. But given Fairborn's demographics, it is a fair guess that Fairborn's "old timers" would be resistant to moves that would increase their individual tax burdens. They probably do not know many families that are likely to benefit from the sacrifices they would make by voting for a tax increase. In fact, with all the transience, the "old timers" may have had a deep concern that the beneficiaries of the tax increase are not really part of the their community at all. The residents of Fairborn may be quite attached to their homes, their neighborhoods and even some of their neighbors, but they are not likely to have the same kind of attachment to the school district and its institutions as the people of Advance, Missouri had. Under the circumstances, it would be rational both from an economic standpoint and an ideological one for the "old timers" to vote against increasing their own taxes. Despite the presence of some households with seniors and others with long tenures in the community, for the people of Fairborn, there was probably just not enough community attachment to withstand the Republican Headwind.

## Conclusion

Smallville school districts resemble Clintonland school districts in that political ideology beyond the Republican Headwind—at least as measured
against partisan support for candidates competing in a presidential election--does not seem to play a large role in the outcome of these elections. Instead, economic self-interest and the general Republican aversion to taxes creates a headwind that must be overcome if a tax increase is to be adopted.

The evidence suggests that one way a school district can overcome the Republican Headwind is by fostering a strong sense of attachment to the community. All other things being equal, smaller communities that are able to attract or retain relatively larger proportions of households with people who are at least 60 years old and that are not beset with a lot of poverty seemed to be best able to pass school tax increases in the Smallville group of districts during 2011. Strong feelings of community attachment, as evidenced by large proportions of households with seniors and the presence of residents with long tenure in the community helped Smallville Adopter districts such as Advance overcome the Republican Headwind and pass the school tax. Lacking these qualities, the Republican Headwind kept Smallville school districts such as Fairborn from voting to give their school districts the additional funds the school district had requested.

Not all Republican oriented districts work this way. In Chapter 7 we will explore the last cell of the proffered typology where we find Republican oriented districts with above median home values.

## Appendix 6A

## Alternative Specification

Table 6A-1 Alternative Specification

| Variable | Coefficient (Std. Error) | Min-Max Change in Probability of Adoption | Change in Probability from 1 <br> Std. Dev. <br> Below <br> Mean to 1 <br> Std. Dev. <br> Above <br> Mean | $P$ value (onetailed) |
| :---: | :---: | :---: | :---: | :---: |
| Educational Attainment | $\begin{aligned} & 10.321 \\ & (6.0 .5) \\ & \hline \end{aligned}$ | 0.784 | 0.233 | 0.044 |
| Homeowners | $\begin{gathered} 5.37 \\ (2.486) \\ \hline \end{gathered}$ | 0.266 | 0.174 | 0.016 |
| White | $\begin{gathered} 1.811 \\ (3.196) \end{gathered}$ | 0.329 | 0.060 | 0.286 |
| Children | $\begin{gathered} -8.762 \\ (8.075) \\ \hline \end{gathered}$ | 0.522 | 0.168 | 0.139 |
| Total Population (log) | $\begin{gathered} -0.844 \\ (0.309) \end{gathered}$ | -0.753 | -0.363 | 0.003 |
| Constant | $\begin{gathered} 0.669 \\ (4.686) \\ \hline \end{gathered}$ |  |  |  |
| N | 74 |  |  |  |
| Pseudo R ${ }^{2}$ | 0.1676 |  |  |  |

## Chapter 7

## Gold Standards in Goldwater Country

If the Republican Headwind is, for the Smallville districts, like a breeze that makes it necessary to wear a jacket for comfort on an autumn day, in the Goldwater Country districts, the Republican Headwind is like the gales from which people are urged to stay indoors in the run-up to a nor'easter in the winter. This strong Republican Headwind is a key reason that the Goldwater Country districts passed tax increases at the lowest rate by far-30.65\%--of the four groups in the typology.

Why should the Republican Headwind have greater force in the Goldwater Country Districts than in the Smallville districts? Two factors explain it. First, as I have previously noted, political conservatives tend to prefer living in smaller venues. According to the Pew Research Center's Political Polarization in the American Public report of 2014, as a person becomes more consistently conservative, the more likely it is that he or she will say that he or she prefers to live in a setting where "the houses are larger and farther apart but schools, stores and restaurants are several miles away (Dimock, Kiley, Keeter, \& Doherty, 2014)." While this speaks directly to population density preferences, it also speaks indirectly about preferences for jurisdiction size. Lower population density generally implies lower population sizes. ${ }^{174}$
${ }^{174}$ Tor this dataset, the correlation between the log of population size and the log of population density is $\mathrm{r}=0.72$.

Larger population sizes, though, tend to have a negative impact on individual political efficacy (Lassen \& Serritzlew, 2011) as well as on satisfaction with local governmental services (Mouritzen, 1989). While the mean population size of the Goldwater Country group of districts is much lower than those of the two Democratic groups, it is more than twice as high as that of the Smallville Group and so if satisfaction with local services is inversely related to population size, absent some countervailing factor, we should expect that as school districts get larger, there may be higher levels of dissatisfaction with the services they provide and less incentive for rewarding them with more tax revenue.

The second factor that can account for the strength of the Republican Headwind in the Goldwater Country districts is education. For the Goldwater Country districts, increasing levels of educational attainment should cut two ways. First, as I noted in Chapter 3, the Goldwater Country districts are second only to the Googleplex districts in levels of educational attainment, probably because they have the second highest percentage of college graduates in the dataset. In accordance with the Educational Attainment Hypothesis, we should see an upward pressure on school tax passage rates in districts where educational attainment is high.

But, on the other hand, It has long been known that high levels of education tend to make a voter more ideological (Abramowitz \& Saunders, 2008; P. E. Converse, 2006a, 2006b, 2006b; Fiorina et al., 2010; Jacoby, 1988). As Jacoby argues:

Formal schooling provides individuals with exposure to information, and training in the use of conceptual knowledge. Both of these factors should facilitate the application of general abstract principles like the liberalconservative continuum, to specific events, people and situations. . . .The reasonable expectation is that liberal-conservative considerations should have a more prominent role among people who have attained higher levels of education (Jacoby, 1988).

Perhaps more to the point, Gelman has pointed out that that highly educated whites, precisely like the ones that live in the Goldwater Country districts, are the Republicans who "are driving political polarization (Gelman, 2014)." Because they are better educated, these kinds of people can be expected to know or to be able to discover what "good Republicans" believe about government services in general and public education in particular. Higher levels of education should also make it easier for people to be able to adopt arguments about whether their local school systems conform to Republican notions of good government.

In this Chapter, I argue that the demographic circumstances of these districts make it extremely difficult to pass tax increases. The general Republican ideology that powers the Republican Headwind gains strength from high levels of educational attainment as well as from the increasing levels of dissatisfaction that may come with increasing population size. Because educational attainment is a double-edged sword in this group of districts, though, it sometimes also helps to moderate some of that dissatisfaction, enabling districts in Goldwater Country to pass school tax increases.

I begin my argument by providing a more detailed discussion of elite Republican attitudes on the scope and role of government in general and on public education in particular than I provided in Chapter 6. I do so, first because these elite attitudes are more likely to be relevant to the way people who live in Goldwater Country school districts think about their public school systems than they were in the less well educated, less ideological Smallville districts, and second, because it is possible that those attitudes may shape the demographics of these districts. Those demographics may, in turn influence levels of satisfaction with school district services and thereby affect the general willingness of a community to pay more in school taxes, Next, I use the generalpurpose logistic regression model I developed in Chapter 3 to provide evidence that educational attainment and population size do, in fact, affect the outcome of Goldwater Country school tax elections.

Finally, I provide case studies of the Madeira School District in Ohio and the Cave Creek School District in Arizona, respectively an Adopter district and a Rejecter district. I show, first of all, that the votes on the respective school tax measures were strongly influenced by ideological thinking. I do this by providing evidence of a strong correlation between the precinct-by-precinct vote for president in 2012 and the precinct-by-precinct vote on the ostensibly nonpartisan tax increase measures in both the Madeira school district and the Cave Creek district respectively. This correlation supports my claim that the two votes are related to each other and that voters in each precinct or polling place probably evaluated the ostensibly nonpartisan school tax issue by the same criteria they
used to evaluate the presidential candidates in 2012. I then show that, consistent with my argument, (i) the voters in the Madeira had good reason to be pleased by the achievements of its school district, and this helped in passing the tax; while (ii) the voters in the Cave Creek school district were probably disappointed with the quality of the schools in their district, and to punish the system for poor performance, they voted against the requested tax increase.

## A More Nuanced Look at the Republican Headwind

## Elite Republican Ideology

In describing Republican values and beliefs to the world at large, the current GOP website says that:
[T]oday's Republicans believe individuals, not government, make the best decisions; all people are entitled to equal rights; any decisions are best made close to home. . . . Our party works to give Americans more choices-in healthcare, in education, in energy, and in the economy-and to free individuals and families from the intrusive overreach of federal bureaucrats. . . .We believe in the power and opportunity of America's free-market economy. . . We oppose interventionist policies that put the federal government in control of industry and allow it to pick winners and losers in the marketplace. ${ }^{175}$

These general values--individualism, self-reliance and free market capitalism-- inform Republican approaches to government in general. They make Republicans such as those in the Madeira and Cave Creek school districts,

[^79]who may be more influenced by ideology than personal economic considerations, quite wary of the idea that governments are generally competent to accomplish their objectives. In 2012, for example, the Pew Research Center for the People and the Press found that over three-quarters of their Republican respondents agreed that government is "usually inefficient and wasteful" while only $41 \%$ of the Democratic respondents thought the same thing (Pew Research Center for the People and the Press, 2012).

Republicans who are influenced more by ideology than personal economic considerations may well carry this general attitude about government into their views of government-provided public education. The 2012 Republican Platform insisted that "enormous amounts of money are being spent for $\mathrm{K}-12$ public education with overall results that do not justify that spending."176 The formulation of this statement implies that money should only be spent on educational programs that produce results. Said Sen. Lamar Alexander (R-TN), in introducing the "Scholarship for Kids Act," 177 "money is sent directly to schools.

Local government monopolies run most schools and tell most students which school to attend. There is little choice and no K-12 marketplace as there is in

[^80]higher education." ${ }^{178}$ Most of the "victims" of this ineffective spending are poor people who are often "trapped in failing schools." 179 Republican elites consider getting children out of those environments to be "the greatest civil rights challenge of our time. ${ }^{180}$

For Republicans such as Sen. Alexander, the reason governmental agencies perform so poorly is that governments are state funded monopolies that generally do not have to face competition or turn a profit, and so they can provide substandard services at high cost. When it comes to education, Republican elites tend to be skeptical that democracy will hold government to account. They believe that powerful teachers' unions have "captured" Democratic politicians, who are willing to put the economic needs of school personnel ahead of the needs of students. ${ }^{181}$ They object to compensation and retention systems that reward teachers for seniority and earning educational credentials instead of for getting better educational results. ${ }^{182}$ For this reason, their solutions tend to focus, on creating alternatives to governmental monopolies and empowering individuals to get what they, in their own judgment, believe is in the best interests of themselves and their families. This, in part, explains why Republican elites tend

[^81]to view "school choice" programs like the one introduced by Sen. Alexander more favorably than do Democrats. ${ }^{183}$

We ought to find that this attitude is reflected in public opinion surveys differently by Republican respondents depending on their level of educational attainment, and that, in fact is, what we do find. In a NBC News/Wall Street Journal poll conducted September 22-26 in 2010, survey respondents were asked how willing they would be to "pay higher federal taxes to improve our country's public schools." The results, broken down by level of educational attainment and party orientation ${ }^{184}$ appear below as Figure 7-1 and Figure 7-2.
${ }^{183}$ In the same NBC/Wall Street Journal poll upon which Figures 7-1 and 7-2 are based, Republicans in the two highest levels of educational attainment were, by a wide margin, more likely than their Democratic counterparts to believe that allowing parents greater flexibility in choosing the schools their children attend and increasing the number of public charter schools would improve the public educational system. Similarly, more Republicans than Democrats in the two highest educational attainment groups believed that increasing the number of public charter schools would be a big improvement for the public educational system.
184 The survey divided party orientation into seven categories and a "Not sure" group. For purposes of Figures 7-1 and 7-2, I have collapsed respondents who said that they were "Strong Democrat," "Not Very Strong Democrat" and "Independent/lean Democrat" into a single Democrats group and respondents who said that they were "Strong Republican," "Not Very Strong Republican" and "Independent/lean Republican" into a single Republican group; "Strictly Independents" and "Not sure" have been excluded.

Figure 7-1 Willingness to Pay Higher School Taxes by Political Orientation and Educational Attainment

## Willing to Pay Higher Taxes to Support Public Schools



Figure 7-1 shows the percentages of Democrats and Republicans at each level of educational attainment who indicated any willingness to pay more in federal taxes to support public education while Figure 7-2 shows the percentages of Democrats and Republicans at each level of educational attainment who

Figure 7-2 Enthusiasm for Higher School Taxes by Political Orientation and Educational Attainment

indicated that they were very willing to pay more in federal taxes to support public education.

It is, of course, difficult to know whether respondents would have reacted differently to a question that focused on state and/or local taxes, but for present purposes, it does not matter. What is important here are the general trends and the contrast between Democrats and Republicans at each level of educational attainment. Figure 7-1 shows that Republicans become less willing to pay more in taxes as educational attainment levels increase; as we should expect from our examination of the Googleplex districts, we would otherwise have expected educational attainment to increase a community's willingness to pay additional taxes. If we assume that the level of educational attainment is a reasonably good proxy for awareness of elite views on taxes and public education, then we
have strong evidence that highly educated Republicans such as those who live in the Madeira and Cave Creek school districts may have adopted elite Republican attitudes toward federal taxes and public education.

The downward trend that appears in Figure 7-1 is not apparent with respect to the most highly educated group of Republicans in Figure 7-2, which gauges Democratic and Republican enthusiasm for higher taxes devoted to public education. What is important here is the absolute level of Republican enthusiasm, particularly in comparison to that of the Democrats. The lowest level of enthusiasm for higher taxes devoted to public education for Democrats, which comes from Democrats who have never graduated from high school, is equal to the highest level of enthusiasm for Republicans, which comes from the Republicans who have the highest level of education. Even here, the level of enthusiasm for higher taxes is only about a third as high as that expressed by the Democrats with the highest level of education.

The main message of Figures 7-1 and 7-2 together is that (i) the higher a Republican individual's level of educational attainment, the more likely it is that he or she will express opinions consistent with the Republican party line on taxes and public education; and (ii) higher educational attainment provides a small edge in enthusiasm for additional taxes supporting education relative to other Republicans at lower levels of educational attainment. In the next sections, I will provide evidence that in Goldwater Country, all other things being equal, better educated communities do in fact have a slight advantage when it comes to adopting school tax increases.

## Population Size

Why conservatives should want to live in areas with smaller populations than do people with more liberal political leanings is an interesting question for which the existing literature provides few empirical answers. I have discovered no individual level data on point, and that probably accounts for the fact that I have discovered no empirical research on the topic. It is, nevertheless fair to take the Republican Party platform's language, which focuses on individual autonomy, the importance of decisions being made "close to home," and individual choice, as being at least expressive of the values of those who drafted it, ratified and supported it, regardless of whether they have actually and intentionally located themselves in smaller communities so as to "practice what they preach."

There is good reason to think that smaller communities are more conducive to the values expressed by the Republican platform than are larger ones. Smaller communities tend to be more homogeneous than larger ones (Dahl \& Tufte, 1973; Denters, 2002; Lassen \& Serritzlew, 2011; Verba \& Nie, 1972). ${ }^{185}$ With fewer people, there is less need for complex rules or institutions designed to manage and direct conflict, and hence, less need for government and all of its attendant costs.

In a September, 2014 poll, the Gallup organization noted that since 1997, Republicans have increasingly reported greater trust and confidence in state and

[^82]local government than have Democrats. While majorities of Republicans and Democrats say that they have "a great deal or a fair amount of trust in their state governments," the gap in the way that Republicans and Democrats responded to the question was 14 percentage points. Similarly, whereas $81 \%$ of Republicans say that they have "a great deal or a fair amount" of trust and confidence in their local governments, only $71 \%$ of Democrats said the same thing. ${ }^{186}$ Though Gallup had no data on why the trend or the gap exists, it remarked:

Though Americans' current confidence ratings in state and local governments are nothing out of the ordinary, Republicans' trust in each is increasing. Republicans have typically expressed the most trust in these levels of government in the past, but the widening gap between Democrats and Republicans could have several significant explanations and implications. . . For one, the GOP's mantra of smaller government could translate literally to higher levels of trust in governments that are both smaller and closer to the citizens they are designed to serve.

While there is no data specifically on Republicans, there is some research on the political implications of community size on internal political efficacy ${ }^{187}$ ("IPE"), trust in government and satisfaction with the level and quality of services provided by government. All of these factors are likely to influence a voter's willingness to agree to pay more in taxes to the level of government responsible for providing those services.

The best studies we have on the topic rely on quasi-experiments where there is data on levels of efficacy, trust and satisfaction both before and after

[^83]various jurisdictions have been consolidated. Lassen and Serritzlew report that citizens in municipalities that had been merged together into larger municipalities have significantly and substantially lower IPE after the merger than they had before it and that the larger the increase in population, the larger the decline in IPE (Lassen \& Serritzlew, 2011). They worry that "citizens in large jurisdictions are less likely than citizens in small jurisdictions to believe that" they have "adequate and equal access to influencing political decisions (Lassen \& Serritzlew, 2011, p. 255)." This could, in turn, lead to the feelings of alienation I discussed in Chapter 2 that discourage people from participating in elections or supporting projects for the benefit of the community at large.

Though not focused on jurisdiction size, Newton and Norris use World Values Survey data to show that trust in government is not the result of individual psychology but that it is, instead, "primarily government performance that determines the level of citizens' confidence in public institutions (Newton \& Norris, 2000, p. 12)." According to other studies, though, population size has a substantial effect on levels of satisfaction with governmentally provided services. Studying the consolidation of Danish jurisdictions, Mouritzen found that because smaller jurisdictional units are more homogeneous and provide services more efficiently than larger jurisdictions, citizen satisfaction with public services increases as population size decreases. This, in turn, leads citizens to be more willing to participate in local politics and to hold more favorable views of local democracy (Mouritzen, 1989). Studying survey data from Denmark, the Netherlands, Norway and the United Kingdom, Denters found that a
municipality's population size modestly reduces the level of political trust and that population size exerts this impact through its impact on the level of satisfaction the population has with the quality of services provided by the municipality (Denters, 2002).

According to this work, then, population size is linked with important determinants of political participation. Because the findings reach the same general conclusions using different data sources, it is fair to generalize the finding to other settings and to conclude that larger population sizes lead to decreased levels of IPE, political trust and satisfaction with publicly provided services in other settings. With low levels of all of these qualities, it is also fair to conclude that, in accordance with the Community Affinity Hypothesis described in Chapter 2, residents of the Goldwater Country districts should become more alienated from their school districts and less satisfied with the services that they provide as those districts become larger, in turn making voters less willing to agree to school tax increases.

Though I have just cited the Community Affinity Hypothesis as a possible explanation of the voting behavior in Goldwater Country districts, it is important to understand that I am not making the same kind of argument with respect to the Goldwater Country districts that I made with respect to the Smallville districts. In the Smallville group of districts, the mean population size was only about 15,000 residents. The Goldwater Country districts have a mean population size of over 32,000 people, and it is therefore hard to imagine that people living in these communities have developed the same kinds of long-standing relationships with
these places or with the other people in their school districts that seem to be present in Adopter districts in the Smallville group. ${ }^{188}$ What I am arguing is that the basic demography of these districts should have a number of adverse affects that should intensify the Republican Headwind, making people who are already ideologically wary of government less willing to pass tax increases as their districts grow in population.

In the next section, I provide a brief overview of the demographic differences between the Goldwater Country Adopter districts and Rejecter districts. I provide empirical evidence both that Adopter districts have higher levels of educational attainment and smaller populations than do Rejecter districts and that these two factors significantly improve the probability that a district will adopt a tax increase. The way in which these factors affect school tax election results in the Goldwater Country group of districts is complex, though, and through case studies of the Madeira City School District in Ohio and the Cave Creek Unified School District \#93 in Arizona, I suggest that population size, educational attainment and the Republican Headwind interact so as to make satisfaction with the educational services provided by the school district a key factor in explaining why Goldwater Country school districts adopt school tax increases.

[^84]
## Goldwater Country Adopter and Rejecter Districts

Goldwater Country Adopter districts can be distinguished from Rejecter districts by two basic characteristics. ${ }^{189}$ First, on average, the Adopter districts rate about 6 percentage points higher in educational attainment than the Rejecter districts, ${ }^{190}$ apparently because in Adopter districts, the percentage of college graduates is 6.7 percentage points higher. ${ }^{191}$ Second, the schools in Adopter districts have populations that are, on average, about 15,000 people smaller, ${ }^{192}$ than were the Rejecter districts.

Do these factors actually play a role in the outcome of school tax elections in the Goldwater Country group of districts? The results of the general-purpose logistic regression model applied to the Goldwater Country districts reported in Table 7-1 suggests that they do. Table 7-1 shows that the districts in Goldwater Country are affected by population size and, as were the districts in the Googleplex group, by the level of a school district's educational attainment. None of the variables that tap into material self-interest-percent homeowners, percent white, percent households with seniors--reach conventional levels of statistical significance. This should suggest to us that the votes on these taxes

[^85]Table 7-1 Logistic Regression Model for Goldwater Country Districts

| Variable | Coefficient <br> (std. error) | Min-Max <br> Change in <br> Probability <br> of <br> Adoption | Change in <br> Probability <br> of <br> Adoption <br> 1 Std. Dev. <br> Above and <br> below <br> mean | P value <br> (one- <br> tailed) |
| :--- | :---: | :---: | :---: | :---: |
| Educational <br> Attainment | 7.967 <br> $(2.356)$ | 0.768 | 0.345 | 0.000 |
| Homeowners | 0.825 <br> $(4.697)$ | 0.084 | 0.029 | 0.431 |
| Whites | 2.153 <br> $(4.423)$ | 0.234 | 0.043 | 0.313 |
| Seniors | -2.09 <br> $(5.417)$ | -0.143 | -0.063 | 0.350 |
| Children ${ }^{193}$ | 4.015 <br> $(0.151)$ | 0.319 | 0.098 | 0.136 |
| Total Population | -0.473 <br> $($ log) | -0.541 | -0.22 | 0.047 |
| Constant | -2.17 <br> $(4.042)$ |  |  | 0.295 |
| N | 62 |  |  |  |
| Pseudo R2 | 0.0914 |  |  |  |

did not involve economic concerns such as preserving or improving home values.
Instead, the results contained in Table 7-1 imply that more intangible values were at stake.

Table 7-1 confirms my insights that in affluent, Republican oriented school districts, the chances of passing a school tax increase are much better in districts where the level of educational attainment is high. School districts with educational attainment scores one standard deviation above the mean were at least 34.5\% more likely to adopt school tax increases than districts where the

[^86]general level of educational attainment was one standard deviation below the mean. ${ }^{194}$ The results are also consistent with my observations regarding population size; School districts with smaller populations are more likely to adopt tax increases even after controlling for education, race and homeownership. School districts with populations one standard deviation below the mean were over $22 \%{ }^{195}$ more likely to pass school tax increases than districts where school quality is lower.

Behind this relatively straightforward presentation of logistic regression results lurks something far more complex. In Figure 7.3, I provide a crosstab

Figure 7-3 Educational Attainment and Population Size for Goldwater Country Adopters

|  | Population Size |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Low Size | High Size |
|  | Low Educational Attainment | $\begin{gathered} 26.08 \% \\ (\mathrm{~N}=23) \end{gathered}$ | $\begin{aligned} & 0.00 \% \\ & (\mathrm{~N}=8) \end{aligned}$ |
|  | High Educational Attainment | $\begin{gathered} 37.5 \% \\ (\mathrm{~N}=8) \end{gathered}$ | $\begin{array}{r} 52.63 \% \\ (\mathrm{~N}=23) \end{array}$ |

showing the percentage of observations matching each cell description that adopted tax increases. As my theory expects, Low Educational Attainment-High Population size districts faired worst of all: not a single one adopted a tax increase. Districts that had low educational attainment and low population size had the next highest passage rate, and that seems reasonable. With one positive factor-low population size—and one negative factor-low educational

[^87]attainment—we should expect those districts to have a higher rate of passage than the cases with no positive factors but worse than the cases with both positive factors. In particular, it would not be implausible to infer that because the key positive factor was low population size, the districts that adopted tax increases were more satisfied with their school district performances than the districts that rejected them.

More puzzling, though, are the cases in the two high educational attainment cells. Theory would suggest that there should be more cases in the high educational attainment-low population cell than there are in the high educational attainment - high population cell. Even more puzzling, though, is the fact that 10 of the 19 cases in Goldwater Country that passed the tax increase are in the in the high educational attainment-high population cell.

Figure 7.4 helps to solve the puzzle. In Figure 7.4, I plot the predicted probabilities of a Goldwater Country district passing a tax increase by level of educational attainment and district population size. The lines represents Goldwater Country school districts at the $5^{\text {th }}, 50^{\text {th }}$ and $95^{\text {th }}$ percentiles of educational attainment for Goldwater Country; a dotted blue line marks the point where the probability of adopting a tax increase and rejecting one is equal.

All three lines have approximately the same downward trajectory, implying lower probabilities of passage as district population sizes increase. The portion of the lines above and below the 50\% point, though, for any of the lines. are not the same. As we might expect in an affluent Republican area, the Republican

Figure 7-4 Impact of Education and Population Size on Likelihood of Adoption


Headwind is strong. For the communities with the lowest level of educational attainment, even the smallest population sizes are not sufficient to raise the probability of adopting a tax increase above 40\%. At this level of educational attainment, on average, only about $10 \%$ of the people who live in these districts have earned college degrees, and it is therefore not likely that they have much appreciation for what counts as top quality education nor any experience with the benefits that excellent education provides.

The line representing the school districts at the $50^{\text {th }}$ percentile of educational attainment for Goldwater Country tells a similar story. Most of that line is below the $50 \%$ probability line. These communities achieve a better than even chance of adopting a tax increase when their populations are relatively
small. If the analysis provided above is correct, we can infer that here, education moderates the Republican Headwind, but beginning at a relatively low level, increased population sizes begin to reduce levels of satisfaction with the services the school district is providing to such an extent that it becomes extremely difficult to turn out a majority favoring a tax increase.

Communities at the $95^{\text {th }}$ percentile, depicted by the red line on the graph, are quite different than the two lower educational attainment groups. In school districts like these, about 45\% of the adults have earned college degrees. Like their peers in the Googleplex group, high levels of educational attainment do a good job of countering the Republican Headwind, particularly in places below about 40,000 people. After that point though, even these highly educated communities cannot displace enough of the dissatisfaction that appears to be inherent in places with larger populations in order to muster enough voters to pass a tax increase.

One reasonable inference that can be drawn from results presented in Table 7-1 and Figures 7-3 and 7-4—and the one I do draw-is that no less than their affluent Democratic counterparts in the Googleplex group of districts, affluent Republicans with good educations probably place the quality of an area's school district at the top of the list when given a choice of where to live. (Warren \& Tyagi, 2004) We will see strong evidence of this in both the Madeira and Cave Creek school districts. Despite the anti-government, anti-tax political ideology prevalent in the Republican world during 2011 and the bad economic times, the people in the districts with the highest levels of education may well have been in
a better position to understand the importance of quality primary and secondary education and so, provided that they were not dissatisfied with the services being provided by the school district, they may have been more willing to provide the additional funding their school districts said they needed despite the Republican Headwind.

## Detailed Illustrations

## Madeira City School District, Ohio

The Madeira school district in Hamilton County, Ohio is the school district the model identified as being the Goldwater Country school district most likely to pass a school tax increase in 2011. This is probably because of its highly educated, affluent population and its excellent school system. The school district is home to about 8,500 people clustered together on 3.37 square miles in a suburban area about 10 miles northeast of Cincinnati, Ohio. The school district operates a high school, a middle school and an elementary school, which, together, educate about 2,000 students.

Over $54 \%$ of the adults who live in the Madeira school district are college graduates. The district has the sixth highest educational attainment score of all Republican districts in the dataset and the highest score for the Ohio districts in Goldwater Country. Close to $80 \%$ of the working adults in the Madeira school district work as professionals or managers while fewer than 10\% earn their livings through manual labor. It is not surprising that a large number of wellknown national and international business organizations, including Procter \& Gamble, Macy's, Inc., Wellpoint, GE Aviation, Citigroup, Duke Energy, Turner

Construction Company, Carestar and Humana are located nearby and can take advantage of Greater Cincinnati's highly educated workforce.

The quality of the school district is a point of local pride for the Madeira community and a selling point for attracting people relocating to the Greater Cincinnati area. Anyone looking for information about Madeira learns this immediately from the city's official website:

Cincy Magazine has ranked Madeira second only to Terrace Park for sales value of housing, low crime rate, high quality of award winning schools and many other variables. To read more follow the link: . . . . Madeira was also recognized in 2009 by Business Week magazine as the 40th best place to raise kids in the U.S, and a Silver Medal was awarded by US News and World Report to the Madeira City School District for being one of the top public high schools in the country. And as of October 2013, the City of Madeira has one of the highest residential recycling rates in the state. There's more! Forbes has ranked Madeira Schools number one in Ohio and two in the entire midwest! Read the article . . . Come and see why Madeira is The Friendly Town! ${ }^{196}$

Of the four sentences in this description of the City of Madeira that make claims about the quality of life there, three make reference to the Madeira school district; one of the four sentences is devoted entirely to the Madeira school district, and instead of providing a link to local attractions, Madeira City provides a link to an article in Forbes Magazine that merely confirms the school district's standing.

[^88]There appears to be a lot about the Madeira school system of which the residents of the Madeira school district can be proud. For the 2011-2012 school year, the Ohio Department of Education ranked the Madeira school district second in the state in terms of academic performance, ${ }^{197}$ up from fifth place the year before. ${ }^{198}$ Using the data from the George W. Bush Institutie on school district quality, Madeira was 1 point below the cutoff for the $99^{\text {th }}$ percentile in school district quality for all of the districts in the dataset. In addition, the Madeira school district, to "characterize the overall educational value of . . . [the] school district in areas that matter most in our community" noted in its "Madeira City Schools Quality Profile" ${ }^{199}$ that

- Mean SAT Scores for 2012 were 579 for reading, 576 for math and 557 for writing while the comparable national scores were 496, 514 and 488 respectively;
- $43 \%$ of the high school's student body had taken at least one of the 15 advanced placement (AP) courses offered by the high school and 77\% of the students who took an advanced placement class had earned at least a 3, qualifying them to receive college credit;
- 75 Madeira High School students (out of approximately 450) had been inducted into the National Honor Society;

[^89]http://www.madeiracityschools.org/docs/BoardDocuments/09192011\ Minutes .pdf
http://www.madeiracityschools.org/userfiles/223/Madeira\ Quality\ Profile\% 202012-2013\%20Final.pdf

- 33 eighth grade students had been inducted in to the National Junior Honor Society;
- The State of Ohio, in 2013, had recognized Madeira High School for its excellent Marching Band and Choir programs;
- $85 \%$ of the teachers had a master's degree;
- The district had 7 National Board Certified Teachers;
- 26 teachers had been certified by the Ohio Department of Education as "Master Teachers";
- 5 Coaches had been cited as Cincinnati Hills League "Coach of the Year"; and
- Madeira High School had 6 Cincinnati Hills League championship athletic teams.

It is important to note here that in addition to tax revenue, the Madeira school district has access to private sources of funding. This well-educated community has been willing to provide private avenues for the "extras" that enhance the educational experience of the Madeira school district's students. Residents of the district who "recognized the need to assist the [high] school in achieving its goals for quality education" formed the Madeira Schools Foundation in $1984 .{ }^{200}$ Since then, it has raised over \$2 million to "enrich the Madeira City School's programs and ensure the financial future of the schools." Specifically, it has established an endowment fund to support "seven areas where additional resources are essential to ensure the promise" of the future, including
${ }^{200} \mathrm{http}: / / \mathrm{www}$. .madeiracityschools.org/content_page2.aspx?cid=228

- Enhancement of all academic, performing and visual arts and athletic programs;
- Computer or teaching technologies for classroom and labs;
- Scholarships;
- Enhancement of library, math and science materials;
- Supplemental funding of capital projects; and
- Professional development of staff.

In addition, the Madeira City Schools Quality Profile notes that "booster organizations" for athletic and music programs had raised over \$150,000 for materials, equipment and programming and that over \$25,000 had been received from anonymous community donors for improvements to the high school's auditorium. The Madeira school district can also point to "partnerships with leading business companies and service organizations" that have given Madeira school district students "real world experiences and the ability to apply concepts they have learned in the classroom."201

What is remarkable about all of this is that despite the fact that, while there are obviously people who have strong positive feelings about the school system and are willing, voluntarily, to provide for the Madeira school district above and beyond their obligations to pay their school taxes, this high degree of private generosity has not created what Oliver calls "bystander effects," in which residents of a community shirk their public responsibilities because they feel that

201
http://www.madeiracityschools.org/userfiles/223/Madeira\ Quality\ Profile\% 202012-2013\%20Final.pdf
somebody else in the community should and will assume those responsibilities. (Oliver, 2001, pp. 56-58) Given the results of the 2011 school tax election, and despite the relatively large sums of money raised over the years, residents of Madeira seem to understand that the private resources being provided are for "extras," supplementing the basic services that must be paid for with tax dollars.

We have already encountered several other Ohio school districts, and so it is unnecessary to restate the economic and political situation Ohio school districts encountered in 2011. According to a slide presentation prepared by district Superintendent Steve Kramer, the Madeira school district found itself facing the loss of $\$ 1.1$ million in state and federal funding. ${ }^{202}$ To address this shortfall, the school district needed to have the voters approve a new levy that would increase the school tax by $\$ 210$ per year or $\$ 17.50$ per month for each $\$ 100,000$ in assessed home value. ${ }^{203}$ In defense of the tax increase, Kramer pointed out that the last tax increase had been granted in 2006 and that the district had, through judicious management, been able to make those funds last for two years longer than they had been projected to last at the time of adoption. "A successful community depends, in great part, on a successful school system," he said. ${ }^{204}$

The Madeira school district adopted the tax increase with a vote of $57 \%$ in favor and 43\% opposed. Figure 7-5 confirms my claim that Republican
https://www.facebook.com/photo.php?v=10150494280952598\&set=vb. 23795112 2916190\&type=2\&theaterFor
$203 \mathrm{http}: / / \mathrm{www} . w c p o . c o m / n e w s /$ political/elections-local/madeira-city-schools-levypasses
204
https://www.facebook.com/photo.php?v=10150494280952598\&set=vb. 23795112 2916190\&type=2\&theaterFor
ideological predilections played a prominent role in the election. Figure 7-5 shows that the Madeira school district followed the same basic pattern we have seen before in the Portland school district (Figure 4-2). The red line on Figure 75 represents the precinct-by-precinct percentage of the Madeira school district vote in favor of the tax increase and the green line represents the precinct- byprecinct percentage of the two-party Madeira school district vote for President Obama in the 2012 election, the latter of which I offer as an approximation of the political ideology of the community. The precincts have been arranged by ascending percentage vote for President Obama. The concordance of the vote

## Madeira Voting on School Tax in 2011 and for President in 2012


on the tax increase represented by the green line with the precinct-by-precinct vote for President Obama represented by the red line is remarkable: They correlate at $\mathrm{r}=0.81$, meaning that the precincts that were more supportive of the Democratic president were also more supportive of the tax increase. Thus, even though this is a Republican leaning district where the vote in favor of President Obama never exceeds $41 \%$ and amounts to only a 34.7\% vote in his favor, precinct level support for the Democratic candidate strongly implies a proportionate level of support for a tax increase. ${ }^{205}$

If ideological considerations were in play as Figure 7-5 suggests they were, then the results of the school tax election are consistent with my explanation of how affluent, Republican oriented school districts approach school tax increases. On the one hand, we should expect high levels of educational attainment to improve the likelihood of passing a tax increase while, on the other, we should expect high levels of educational attainment simultaneously to exert a downward ideological pressure that can be countered with evidence of good district performance. The regression line superimposed on the green line on Figure 7-5 can be thought of as the baseline for Republican ideology and therefore a hypothetical representation of where the school tax election might have come out had the Madeira district been only mediocre. The regression line superimposed on Figure 7-5's red line (which is almost parallel to the green line's regression line) shows where the election did come out. The 17.41 percentage point gap

[^90]between the intercepts of the two regression lines can be attributed to community satisfaction with the school district's performance. In this regard, I have presented ample evidence that the Madeira school district was at least meeting the community's quality standards, and this may ultimately have been the reason that the community was willing to increase its own taxes to meet the school district's stated need. Madeira is therefore consistent with the implications of Table 7-1: For Highly educated Republican school districts with high levels of school district quality, the obstacle created by the Republican Headwind can be overcome by good performance.

## Cave Creek Unified School District \#93, Arizona

The Cave Creek school district is a moderately large suburban school district located about 30 miles north of Phoenix and Scottsdale. It is a typical, affluent Republican oriented district with a population that is over $94 \%$ white and where over $91 \%$ of the homes are owned by the people who reside in them. This is staunchly conservative territory where Barack Obama could muster only $28.37 \%$ of the vote against Mitt Romney in 2012.

The Cave Creek district serves about 6,000 students. It has four elementary schools, a middle school and a high school. Arizona is a "school choice" state, and though, theoretically, students may attend any Arizona school, regardless of its location, the Cave Creek district's attendance base draws children mainly from the communities of Cave Creek, Carefree and Rio Verde. The three main communities can account for about $18 \%$ of all school district residents; the remainder are scattered throughout the rest of the district. While
the district's population of about 51,300 people is the $12^{\text {th }}$ largest in Goldwater Country, the Cave Creek district's theoretical population density is about 271 people per square mile, exactly the quadrant median, but well below the quadrant mean of 508 people per square mile. In part, because the district is so sparsely populated, it is not surprising that, unlike the Madeira school district, there are no large employers in the immediate vicinity and, consequently, over $15 \%$ of the work force works from home.

As in the Madeira school district, the general level of educational attainment in the Cave Creek district is high, with almost $58 \%$ of its residents older than 25 holding at least a bachelor's degree. The district is highly affluent, with an adjusted median home value of $\$ 684,969$, about triple what it is in the Madeira school district. The Cave Creek school district's adjusted median household income is in excess of $\$ 110,000$, which is about $\$ 30,000$ higher than it is in the Madeira school district. While it rates at about the $75^{\text {th }}$ percentile for district quality (based on data from the George W. Bush Institute), considering all districts in the dataset, it rates between the $50^{\text {th }}$ and $75^{\text {th }}$ percentile for the Goldwater Country districts, well below the Madeira school district that rates above the $95^{\text {th }}$ percentile for all Goldwater Country districts and just a point below the $99^{\text {th }}$ percentile cutoff for all districts in the dataset. The Fitch Rating Agency, in 2012, confirmed the school district's AA bond rating, ${ }^{206}$ noting that the district

[^91]had a "sound financial position" and that its "proactive financial management" had done a good job in addressing the recent funding shortfall. ${ }^{207}$

Despite a vigorous campaign by Learn Yes.org, a citizen group that argued that a "no" vote might have an adverse impact on property values, ${ }^{208}$ and warnings from the district's superintendent that failure to adopt a tax increase could result in the loss of almost 100 teaching and teacher's aid positions together with cuts in all-day kindergarten, art, music, band and the world language program the school system had recently adopted, ${ }^{209}$ the voters rejected the tax increase by a vote of $44.18 \%$ in favor to $55.82 \%$ opposed.

In Figure 7-6, I present the results of the Cave Creek school tax election and the 2012 presidential election by Cave Creek polling location. ${ }^{210}$

Figure 7-6 provides additional support for my claim that in affluent, Republican school districts, ostensibly nonpartisan school tax elections are, in fact, heavily influenced by political ideology. We see the same evidence of ideological voting that we saw in Portland (Figure 4-3), and Madeira (Figure 7-5). The correlation between the school tax vote and the presidential vote is $r=0.68$. Higher levels of support for President Obama generally imply higher levels of support for the tax

[^92]
increase while lower levels of support for the president imply lower levels of support for the tax increase. ${ }^{211}$ Just as in Figure 7-5, the regression lines for the two elections are nearly parallel with a gap between their intercepts. Just as, in Figure 7-5, the regression line for the school tax has a higher intercept than the regression line for the presidential election, the regression line for the school tax has a higher intercept than the one for the presidential election. The gap between the intercepts can likewise be thought of as the impact of the level of the community's satisfaction with the school district's performance. Figure 7-6 implies that the community's level of satisfaction was low and insufficient to move the intercept high enough to pass the tax increase.

While the Cave Creek school district had a relatively high district ranking score compared with other Arizona school districts, the community's residents had good reason to believe that Cave Creek school district was not providing a high quality education, at least compared to national standards. Arizona schools, in general, are among the worst performing public schools in the country. The "Kids Count Data Center," sponsored by the Annie E. Casey Foundation, for example, rated Arizona's educational performance the fifth worst in the country in both 2012 and 2013, ahead of only Nevada, New Mexico, Mississippi and West Virginia. ${ }^{212}$ While these kinds of

[^93]rankings are probably not the kinds of materials voters take into the voting booth with them, it is likely that they did know that the quality of the education the district was providing was not top-notch. The residents of the Cave Creek district, after all, have the third highest level of level of educational attainment in the Goldwater Country group of districts, ranking between the $90^{\text {th }}$ and $95^{\text {th }}$ percentile for educational attainment in the dataset, and this fact makes it likely that they could appreciate what counts as excellent education and what does not. As the CCUSD Watch, a blog which identifies itself as "an advocacy organization focused on Cave Creek Unified School District No. 93,"213 put it:

As we have stated before, these . . .[in-state grades] are a low bar and in no way represent the levels where we want and need our students to perform at [sic].

We all know how poorly Arizona does in comparison with the rest of the U.S., so being the best in Arizona does not prove much. One of the Cave Creek Unified [School District] board members said it best...
"We can no longer pride ourselves on our performance in the past nor can
we count on state standards to be accurate judges of our future

[^94]performance...We should be looking nationally and globally to find the standards we should set...If we set our expectations higher than what Arizona thinks is acceptable, we can better equip our students for the future and better prepare them for the world beyond Cave Creek" (quoting Mark Warren, Cave Creek Unified Governing Board Member) ${ }^{214}$ (emphasis original).

Among the disappointments the CCUSD Watch pointed to in the year leading up to the school tax vote were:

- $35 \%$ of the $6^{\text {th }}$ graders at the district's middle school could not pass the state's standardized math test;
- The district's high school, Cactus Shadows High School, was no longer being recognized on the Washington Post's Challenge Index list for Arizona High Schools; ${ }^{215}$
- Cactus Shadows High School had also failed to make Newsweek's Best High Schools List as it had in 2010;
- Three of its seven schools were no longer performing at the "Excelling Level" based on standardized Arizona Achievement test scores;
$214 \mathrm{http}: / / c c u s d w a t c h . b l o g s p o t . c o m / 2011 / 10 / c a v e-c r e e k-u n i f i e d-v e r s u s-n a t i o n-a n d . h t m l ~$ ${ }^{215}$ America's Most Challenging High Schools ranks schools through an index formula that's a simple ratio: the number of Advanced Placement, International Baccalaureate and Advanced International Certificate of Education tests given at a school each year, divided by the number of seniors who graduated that year. A ratio of 1.000 means the school had as many tests as graduates.
http://apps.washingtonpost.com/local/highschoolchallenge/
- Cactus Shadows High School underperformed all of the high schools in adjacent districts in math;
- Throughout the district, writing test scores had dropped after a similar drop in the preceding year;
- The middle school and the high school had failed to make "Adequate Yearly Progress," a key benchmark measurement under the federal "No Child Left Behind" Act;
- The District had failed to offer advanced placement (AP) courses in basic fields such as computer science, statistics, chemistry and physics; and
- The George W. Bush Institute's Report Card for Cave Creek showed that Cave Creek district was at the $57^{\text {th }}$ percentile for math and the $68^{\text {th }}$ percentile in reading compared to students in 25 other developed countries. ${ }^{216}$
"It is not good enough to be near the top [of the State]," complained the CCUSD Watch. "CCUSD should be the top district in the state. Educators would kill for the demographics like our children have [sic], and instead of trying to push our kids to be the best and compete with the top schools in the US or the world, the district and governing board are satisfied teaching our children to the state standards"217 (emphasis original).

The Sonoran News made precisely this same point about a month before the election by publishing what appears as Figure 7-7. Focusing on $8^{\text {th }}$ grade
${ }^{216}$ By comparison, the Madeira school district rated at the $72^{\text {nd }}$ and $84^{\text {th }}$ percentiles for math and reading respectively against students in the developed countries.
217 http://ccusdwatch.blogspot.com/2011/04/cave-creek-unified-not-even-best-inits.html\#more

Figure 7-7 Educational Spending and Math Achievement Scores in Cave Creek

math scores, the graph shows that despite an eight-fold increase in school spending over 10 years, $8^{\text {th }}$ grade math scores had actually declined. Far more damning than this for the Sonoran News and the CCUSD Watch, though, was the fact that the district's
capture rate-total district enrollment divided by the total number of children living within the school district's boundaries—had fallen from $80.7 \%$ in 2000 to $68.4 \%$ in $2011 .{ }^{218}$ That meant that over 2,500 children living within the Cave Creek district had gone to private schools or taken advantage of the state's school choice law to seek education elsewhere. Said the CCUSD Watch:

According to Applied Economics, the district's demographer, most districts in the metropolitan area have a capture rate of 75 to $80 \%$. . . So it is clear that all the policies, programs, and governing board members over the past 12 years have done nothing to stop the decline of the district. Sure, our students have "world languages," can use iPads in the classroom, experience differentiated instruction and flipped classrooms, but this window dressing has done little to stop the outflow of families voting with their feet. Parents do not want this window dressing, they want real substance so our children will be able to compete globally. Other schools and districts are providing it so they are leaving.

When confronted with a government agency that is not providing the services to which they feel entitled, voters can express their displeasure at the ballot box either by voting to replace the elected officials with others who will do what the voters want, or by voting to withhold the resources the agency says it needs to do the job properly. Despite its tough criticism of the school district, the CCUSD Watch, in supporting the tax
${ }^{218} \mathrm{http}: / / c c u s d w a t c h . b l o g s p o t . c o m / 2012 / 11 / c a v e-c r e e k-u n i f i e d-a n d-~$ enrollment.html\#more. According to the same chart, in 2012, it had fallen further to 64.8\%.
increase, urged Cave Creek district voters to focus their attention on the elected officials and not on the funding:

This override isn't about new buildings or laptops or swimming pools, this is about the classroom. This override money goes directly to support the students and our teachers. With the passage of this override, there will be no excuse for the district to make cuts that affect our students. . . . Keep your powder dry for the governing board elections in 2012 where we can effect real change. Instead of "keeping . . . [their] powder dry for the governing board elections in 2012 where . . .[they could] effect real change," voters chose to express their displeasure with the state of affairs in the school district, as we might expect many other voters in other Goldwater Country districts to have done, by voting against the tax increase.

## Conclusion

Goldwater Country school districts share some important characteristics with the affluent Democratic districts in the Googleplex group and the less affluent Republican districts in the Smallville group. Just as in the Googleplex group of districts, educational attainment matters. Highly educated districts in Goldwater Country were much more likely to pass tax increases than were districts that had a lower level of educational attainment overall. The model and the two case studies suggest that highly educated people in these districts are pragmatic, understand, perhaps from personal experience, that their children will be competing against workers from all over the world and that whereas, "in the past, workers with average skills, doing an average job, could earn an
average lifestyle . . . . Being average [today and in the future] just won't earn you what it used to" (Friedman, 2012a; Cowen, 2013). For these kinds of parents, an average education for their children is simply unacceptable.

Higher levels of educational attainment may be a double-edged sword in these districts. Despite the fact that, ordinarily, better-educated communities are more likely to adopt tax increases than communities with lower levels of educational attainment, ${ }^{219}$ higher levels of educational attainment also intensifies partisan commitment, making liberals more liberal and conservatives more conservative. (Abramowitz \& Saunders, 2008; Converse, 2006; Fiorina, Abrams, \& Pope, 2010; Jacoby, 1988; Zaller, 1992). We saw evidence in both the Madeira school district and the Cave Creek school district, both of which had high levels of educational attainment, that ideological predilections appeared to influence the votes on the school tax increase. It appears that, consistent with the Republican National Committee's self-description and with the general ideology of Republican elites such as Sen. Alexander, in districts where highly educated residents believe that the school system is doing a good job, voters are sometimes willing to look past any pre-existing ideological doubts about the efficacy of government and reward the school district with a "yes" vote. But, in districts where the highly educated residents perceive that the school district is not doing a good job, again in accordance with Republican ideology, voters may see that poor performance as

[^95]confirmation of a pre-existing Republican perception that government is generally inept and wasteful, and, therefore, that the school district's request for additional revenue should be denied.

In support of this argument, I have offered the fact that the model's Educational Attainment variable is positive, significant and substantial while the Total Population (log) variable is negative, significant and substantial. None of the other variables in the model reach statistical significance. Because voters in Goldwater Country districts are likely to be skeptical of governmental authority, they demand proof that their tax dollars are actually buying the services they believe they are paying for. Well educated school districts in small communities such as the Madeira school district that are doing a good job in providing high quality education compared to other school districts in Goldwater Country do significantly better at the polls then do districts, such as the Cave Creek district where the the size of the population is likely adversely to affect levels of satisfaction with school district services.

While there is nothing a school district can do, at least in the short term, that can raise its surrounding community's level of educational attainment from low to high, nor is it likely that a school district can moderate the Republican Headwind that blows steadily through its neighborhoods, Goldwater Country school districts that wish to be taken seriously at the polls should do everything possible to demonstrate that they are competently providing the value the surrounding community expects. Failure to do so, in a well-educated, affluent Republican community, is likely to result in electoral defeat, and it might trigger a "vicious cycle" as appears to be happening in the Cave Creek
district: Dissatisfied families could begin fleeing the local public school system to enroll in better performing neighboring schools, private schools, or the charter schools for which Republican leaders such as Sen. Alexander seem to have a great affinity. Once residents pull their children out of the local public school system, they will have reason to believe that they are not receiving anything in return for school taxes paid. They may then begin refusing to support school tax increases, and insist, instead, on lower school taxes, leaving behind a poorly funded public school system for those who lack the means to vote with their feet.

## Appendix 7A

## Alternative Specification

| Variable | Coefficient <br> (std. error) | Min-Max <br> Change in <br> Probability of <br> Adoption | Change in <br> Probability <br> of <br> Adoption <br> 1 Std. Dev. <br> Above and <br> below <br> mean | P value <br> (one- <br> tailed) |
| :--- | :---: | :---: | :---: | :---: |
| Educational Attainment | 8.147 <br> $(1.839)$ | 0.775 | 0.35 | 0.000 |
| Homeowners | 0.05 <br> $(4.772)$ | 0.005 | 0.002 | 0.596 |
| Whites | 2.492 <br> $(4.928)$ | 0.257 | 0.049 | 0.307 |
| Children | 4.015 <br> $(0.151)$ | 0.319 | 0.098 | 0.136 |
| Total Population (log) | -0.515 | -0.574 | -0.236 | 0.000 |
| Constant | $(0.151)$ | -3.612 |  |  |
| N | $(3.966)$ | 62 |  |  |
| Pseudo R ${ }^{2}$ | 0.0968 |  |  |  |

## Chapter 8

## Conclusion

## Summary of Key Findings

The key finding of my research is that, consistent with Lentz (Lentz, 1999) and Gimpel and Schuknecht, (Gimpel \& Schuknecht, 2004), the willingness of American school districts to raise taxes depends on economic and political context. With respect to each of the four types of communities I identified for this project, the main factors that maximize the chance that a school district will pass a tax increase are as follows:
(i) Affluent Democratically oriented districts are more favorably disposed to tax themselves for the benefit of their school systems than any of the others, but whether a community will adopt a tax increase depends on the level of educational attainment that prevails there. When an affluent Democratically oriented community is highly educated, there is a much greater chance that it will pass a tax increase than if it is not.
(ii) In downscale Democratically oriented school districts, the presence of high percentages of renters, poor people and others who do not expect to have to pay much more in new taxes immediately tends to maximize the likelihood that the community will pass a tax increase. Large percentages of homeowners in these districts can be problematic.
(iii) In downscale Republican oriented districts, strong attachments to the community marked by small population sizes and a high percentage of households with seniors maximize the chances that the district will pass a school tax increase.
(iv) Educational Attainment and population size are the most influential factors affecting school tax elections in affluent Republican districts. Low levels of educational attainment virtually guaranty that a tax increase proposal will be defeated. Higher levels of educational attainment improve the likelihood that a tax increase will be adopted, but as population size increases, the likelihood of adopting a school tax increase decreases even for districts with relatively high levels of educational attainment. High levels of educational attainment moderate the impact of population size on the probability of adopting a tax increase.

These findings reflect the different ways political ideology and wealth affect voters in each community type. Democrats generally favor educational spending and are willing to pay more if the proposed increase is affordable. Republican communities prefer to keep taxes low, but will agree to higher taxes if they are convinced that those taxes are going to do some good, either by bolstering institutions that help define and unify the community or by rewarding the success of the school district.

## Discussion of Findings

Building on Bishop and Moretti, I have argued that communities are now defined by dimensions of wealth and political ideology. I used those dimensions to construct a typology with a high affluence Democratic cell, a low affluence Democratic cell, a high affluence Republican cell and a low affluence Republican cell. I have shown that identifying and understanding the factors that improve or reduce the chances that a school district will adopt a proposed tax increase require a recognition of where that school district would be located within the typology.

The literature suggests, for example, that the level of educational attainment in a community can be an important factor in determining whether a community will adopt a tax increase for the benefit of its school system (Piele \& Hall, 1973, pp. 117-18 and studies cited therein). According to the literature, people living in areas with high educational attainment generally appreciate the tangible and intangible benefits a good education can bring to life (Berkman \& Plutzer, 2005, p. 44). In my dataset, moving from the school districts one standard deviation below the mean to the districts one standard deviation above the mean improved the chances of adopting a tax increase by more than $16.7 \%$; considering the full range of the variable, moving from the school district with the lowest level of educational attainment to the highest improved the probability of adopting a tax increase by over 60\%. This result, though, was largely driven by the highly educated school districts in the affluent Googleplex and Goldwater Country districts. Considering the Clintonland and Smallville districts together
without the Googleplex and Goldwater Country districts, educational attainment had no statistical effect on the likelihood of adopting a tax increase.

For affluent communities such as the Googleplex Adopters and the Goldwater Country districts, high levels of educational attainment significantly improved the chances that school districts would adopt school tax increases. This statement is true, as far as it goes. What is missing in this analysis is the powerful role that political ideology plays in shaping the results of the school tax elections in both Democratic and Republican communities.

Educational attainment was a double-edged sword in the Republican oriented school districts of the Goldwater Country quadrant. In addition to making people more likely to appreciate the value of good education, higher levels of education also seemed to make people more ideological. Republican ideology tends to stress the ineffectiveness of government, the importance of individual choice and the market-based value of rewarding success. Laden with this view of governmental services, voters in affluent Republican oriented communities appear to be skeptical of government officials who ask for higher taxes, particularly if their districts had large populations. In this dataset, affluent Republican oriented communities with large populations, places where theory tells us that people are the most likely be the most dissatisfied with the services government provides or to feel the least internal political efficacy, were the least likely districts to adopt tax increases. Even so, in the Goldwater Country districts, small populations and/or high levels of educational did not guarantee that the
community would adopt the requested tax increase. This is what we should expect to happen, given the Republican worldview just described.

The Democratic Googleplex and Clintonland districts, places not as deeply affected by the Republican ideology described in the preceding paragraph, by contrast, were much better able to adopt tax increases. This is also what we should expect, given the fact that Democrats customarily tend to look more favorably on education than do Republicans and the fact that Democrats tend to favor redistributionist policies more than Republicans do. ${ }^{220}$ In the Googleplex group of districts, high levels of educational attainment were positively correlated with wealth, suggesting that in addition to making good primary and secondary education widely available for its own sake, the people living in these districts had experienced the benefits good education can bring and wanted to ensure that the advantages of education would be available to the next generation. The high correlation between education and wealth also explains why some Googleplex districts rejected the tax: Communities with lower levels of education are also less wealthy and therefore less able to afford tax increases.

While educational attainment did not play an important role in the Clintonland or Smallville group of districts, what did seem to matter in the Clintonland districts was wealth. As I demonstrated in Chapter 5, when voters are worried about their home values and their family budgets, they have little sympathy for higher taxes unless they are likely to benefit (or don't expect to experience any economic hardship) from it. Personal economic factors were

[^96]much more important in shaping the outcome of school tax elections in these districts than the more abstract concerns about the value and quality of education apparently at play in the Adopter districts of the Googleplex group and in the Goldwater Country districts. That is probably why Clintonland districts with more renters (who would not be affected immediately by a property tax increase), more people living in poverty and lower median income were more likely to adopt tax increases than the other districts in the group.

School districts with a large percentage of seniors should have difficulty passing tax increases, particularly if we accept the Gray Peril hypothesis. People of limited means, such as seniors, who are living on fixed incomes, should be loath to contribute to the purchase of public goods from which they receive no direct benefit. But that is not what happened in the Smallville group of districts. We know from Chapter 3 that Republicans tend to prefer smaller communities than do Democrats (see also Dimock et al., 2014), and one possible explanation for that preference could be that Republicans prefer to live in communities where they have a higher degree of political efficacy (Dahl \& Tufte, 1973; Oliver, 2001; Verba \& Nie, 1972). In the Smallville districts, but not elsewhere, we saw that attachment to the community—evidenced by small population sizes, deep roots and low transience--tended to encourage and facilitate the kinds of communal norms that Wong says make people more willing to contribute to the common good (Wong, 2010).

## Study Limitations and Recommendations for Future Research

Replication and Expansion
One of the key objectives of this project was to provide findings that are more easily generalizable than are those of earlier research based on case studies of one school district, a handful of school districts or even all of the school districts in a single state. By using a relatively large number of school districts from multiple states that placed increased school taxes on the ballot, I believe that I have accomplished this objective. As a group, these districts appear to possess a varied selection of demographic attributes, which should make them fairly representative of the country as a whole.

On the other hand my dataset, does not include any school districts from the states east of Ohio or from the states in the Old Confederacy. This is due to the fact that data from these states were not available, either because some school districts place school budgets (and the power to tax) in the hands of county or city councils or because the school districts are not required by law to post details about school tax elections on a website or on any reasonably complete and easily accessible registry. My study therefore does not take distinctive regional factors into account. In particular, I note that there are only 9 school districts in my dataset where the white population is not a majority, and 6 of those jurisdictions come from California. This means that my dataset probably does not include any school districts that may have been affected by racial segregation or the racial discrimination addressed by Brown v. Board of Education and its progeny or the Voting Rights Act of 1965. Given more time and more resources, the database could be expanded to include school districts
that were otherwise unavailable to me. This would improve the generalizability of my findings.

Finding a way to add more school districts to the dataset would also improve the power and reliability of the statistical analysis. Though most of the variables upon which I relied are highly significant even using two-tailed tests of statistical significance, more cases would have allowed me to add variables to the general-purpose logistic regression model in order to test or to control for other factors that might have added depth to my arguments. Variables that I could not include due to concerns about statistical power included measures of poverty, school district quality, tenure in a community, population density and the use of private school as an alternative to public schools.

## Other Kinds of Taxes

I have focused my efforts in this study on school taxes. I did this because school taxes are relatively ubiquitous, and focusing on them assured me of finding a reasonably large number of cases to analyze. School taxes, though, are not the only kinds of taxes localities place on the ballot. Throughout the United States, voters consider taxes for roads, libraries, police and fire departments and other public amenities and services. Future research could tell us whether there is something unique about the way that communities vote with respect to funding educational services or whether the same kinds of factors come into play when other kinds of public goods are on the ballot. It might also be interesting to find out whether people think differently about taxes dedicated to general operating costs such as salaries, small tools, small-scale equipment and
deferred compensation than they do about taxes dedicated to the creation of larger, more permanent communal assets such as schools, fire stations and parks.

## Adding Temporal Context

This project focused on school tax elections that took place during a single year. Using school tax elections that occurred during a single year enabled me to produce a reasonably clear snapshot of a moment in time. The procedure allowed me to focus on a time when there were difficult financial and political circumstances that placed the choice of adopting a tax or potentially degrading a community asset into sharp focus. Using another year during which the need was less pressing or the pressure on family budgets was less intense might have resulted in a smaller, less diverse database. With a growing economy and increasing real estate values, cash flow to school districts can more easily keep pace with school district needs, making appeals to voters for more operating cash less necessary. I chose to use elections that took place in 2011 because I assume that if a community was willing to adopt a tax increase in hard economic times when family budgets are tight, it should also be willing to adopt tax increases in better times when it is easier for taxpayers to make ends meet.

However, just as elections take place within economic and political contexts, they take place in a temporal context as well. My research does not account for the fact that it is not unusual for school districts to ask voters for tax increases multiple times within 12 month periods if their first requests are rejected at the polls. There were several school districts in the dataset that
placed the same or a similar tax increase proposal before the voters more than once in 2011, but to avoid statistical complications, I did not consider these additional attempts. There were also some school tax elections in 2011 that were follow-ups to unsuccessful 2010 tax increase elections, and there may have been some unsuccessful attempts in 2011 that were followed by successful attempts in 2012. Adding a temporal context might enable scholars to gain better insight into whether there is anything a school district saddled with "unfavorable" demographic traits can do to convert likely failure into success.

Future research might consider a school district's history of voting on tax increases over multiple attempts and over multiple years. It could be important to know how school districts that easily adopt tax increases most of the times they are presented on the ballot differ from school districts that have significantly more difficulty in adopting them. In particular, it might be useful to know how demographic changes in communities affect the probabilities of a tax increase and how bad things have to get in a school district before voters grant the school district a tax increase.

Incorporating a temporal context into this research could also begin to address a much bigger and more important question: Does a community's willingness to increase taxes for its school district produce any long term advantages for its students? It could be that school districts that easily and reliably raise tax revenues when those tax increases are requested are better able to attract teachers who are more effective at preparing children for work or college than their counterpart districts that have a more difficult time raising
revenue. Ohio's Madeira City School District is and will likely remain an academic powerhouse that probably improves the chances that its alumni will become successful students at good colleges. But, would that continue to be true if the surrounding community determined either that some lower level of educational services were acceptable or if the community occasionally refused to adopt tax increases when requested? Is it more likely that students graduating from the Advance school district in rural Missouri (an Adopter district) will get into good colleges and be successful students than those who graduate from the Fairborn City, Ohio school district (a Rejecter district)? Perhaps, as Amanda Ripley suggests, instead of money, what really matters in shaping the education of children is the determination of a community to take education seriously and to communicate that seriousness to students. (Ripley, 2013) That seriousness is surely evidenced by a community's willingness to adopt tax increases, but adopting tax increases might not be the only way to convince students that education really matters.

## Chapter 9

## Epilogue

Class is in Session
I began this project because I was interested in leaning about when and why people are willing to place communal interests over personal ones. I believed that concepts like trust, social capital or even altruism were part of the answer. My research led me away from my initial abstract interest and toward something much more complicated and nuanced. Hamlet was right when he advised Horatio that there " are more things in heaven and earth . . . than are dreamt of in your philosophy."

I now know that, at least with respect to school taxes, the level of affluence and the political orientation of a community make a profound difference. Through the last 8 chapters, I have demonstrated that Bishop, Moretti and Florida are largely correct: American communities are becoming increasingly segregated by affluence and political orientation. This segregation extends to some of the smallest communal units for which we have data and affects they way they deal with even ostensibly non-partisan policy matters such as school finance.

Within this observation lurks a series of important and troubling questions: Is the patchwork system of local control we, as a nation, use to provide education to our children sensible, effective and fair? Will it leave our children with a more
secure and prosperous country poised to face the uncertain future of the $21^{\text {st }}$ century?

Though I have focused on matters of educational finance, the questions I have just raised are far bigger than that. Education finance is bound up in beliefs about who "we" are, where "we" are going and what "we" believe "our" children need to prepare themselves for what is to come. The initial problem, from a policy standpoint, is whether "we" are members of discrete and independent communities and whether "our" children are the kids who attend our local schools, or whether "we" are members of single nation committed to the idea of equal opportunity for all of the children who live under the guarantees of the federal Constitution.

Our system of public education is a path dependent product that grew up when local economies mattered more and the national and global economies mattered less (Berkman \& Plutzer, 2005). The education of children was never an object of the national government described in the Constitution. Instead, elementary and secondary education has traditionally been the responsibility, first of individual parents or small communities, and then later, the responsibility of the states. Parents, then smaller communities, then progressively larger ones shouldered the responsibility of paying for the cost of educating children, and with the burden of paying for education came the prerogative of deciding what ought to be taught. Even when states took the legal responsibility for providing education to children, the tradition of local control of public education was strong, and the states left a healthy share of discretion in the hands of local communities
together with a substantial portion of the responsibility for paying for it (Berkman \& Plutzer, 2005).

For much of our history, none of this was problematic. Most of our children remained tied to the communities where they were raised, and their educations prepared them for jobs located in the area. A "three R's" education was often more than sufficient for most people to become productive members of their communities, to make a living and to participate intelligently in civic life.

None of this is true today. Over the last 75 years, we have become an increasingly mobile society (Putnam, 2000). It is less likely today that people will be employed in the same localities in which they were born, raised and educated than ever before. (Moretti, 2013, pp. 155-156) What a child needs to know or must be able to do in order to get a job and become self-supporting in today's knowledge based economy is quite different from what he or she needed to know 50 years ago in a manufacturing based economy or over 100 years ago in an economy based on agriculture. (Friedman, 2012a) As the Supreme Court said in the landmark Brown v. Board of Education decision:

Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing
him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of education. ${ }^{221}$

Children today are not only competing with other children in the neighborhood or even in the extended community for jobs; instead, they are competing with children from all over the country and from all over the world. Businesses seeking to get or maintain an edge in what has become a global economy are not shy about importing the talent they need or even relocating themselves to areas where that talent is abundant and relatively inexpensive. (Friedman, 2012b; Moretti, 2013) Even if a person’s skills make him or her "one in a million," on a planet with 7 billion people, that means that there are likely to be at least 70 million people with the same skills.

We continue to trust parents and local politicians to decide what students learn and how they learn it. This is not to say that parents and local politicians cannot do a good job with this, but the gross results of their efforts are not encouraging. The Programme for International Student Assessment for 2012 (PISA), for example, shows the U.S. lagging behind its peer countries that are members of the Organization for Economic Cooperation and Development (the "OECD"). Compared to the other 33 OECD countries, U.S. students were $26^{\text {th }}$ in

[^97]math, $17^{\text {th }}$ in reading and $21^{\text {st }}$ in science ${ }^{222}$ (J. Ryan, 2013). Even in creative problem solving, an area in which U.S. students were thought to excel, Americans now score in the middle of the pack, behind Singapore, South Korea, Japan, several provinces of China, Canada, Australia, Finland and Britain (Rich, 2014).

Some of this may be a reflection of the values of those parents and local politicians. According to a recent Pew study on climate change, for example (Pew Research Center, 2013), there is a pronounced divergence of opinion when a respondent's religious and political party affiliations are taken into account. As Colby College Professor Jenny Finney Boylan, commenting on resistance to the Common Core State Education Standards, ${ }^{223}$ put it:

What we're arguing about is what we want from our children's education, and what, in fact, "getting an education" actually means. For some parents, the primary desire is for our sons and daughters to wind up, more

[^98]or less, like ourselves. Education, in this model, means handing down shared values of the community to the next generation. Sometimes it can also mean shielding children from aspects of the culture we do not approve of, or fear.

For others, education means enlightening our children's minds with the uncensored scientific and artistic truth of the world. If that means making our own sons and daughters strangers to us, then so be it. (Boylan, 2014)

Boylan's first model is consistent with a conservative worldview while the second is consistent with a liberal one. In a country where these diametrically opposed opinions are evenly distributed over space, it might be possible-in fact, it would be imperative-for the two sides to work out a compromise where all children get exposure to a curriculum that values both tradition and enlightenment. But my research, confirming that of Moretti, Bishop and Florida, underscores the fact that opinion on these questions is not evenly distributed on a geographic basis. Instead of being forced to accommodate each other, people holding one of these views or the other are simply relocating to places where the community largely agrees with them. Our self-segregation along lines of political ideology and affluence affects how and what we teach our children, and we are in danger of creating parallel societies with parallel school systems where some people are better able to reap the rewards of the $21^{\text {st }}$ century economy than are others.

Consider, for example, what is happening in two Louisiana communities currently combined into a single school district. The Village of St. George and several other nearby areas (collectively "St. George") constitute an affluent Republican enclave within the boundaries of the East Baton Rouge Parish School System (the "EBRPS") in Louisiana. The struggle between St. George and the EBRPS provides a fitting illustration of several of the principles discussed in previous chapters, and, it may be the face of things to come. ${ }^{224}$

In late 2013, residents of St. George began an effort to secede from the EBRPS by incorporating St. George as a new Louisiana city. According to the proponents:

Incorporating the city of St. George was not the original intention of our grassroots group. Originally, we were attempting to provide local schools for local children through the creation of an independent school district in the southern part of the parish ${ }^{225}$. . We want to create an outstanding community based, public city school system with a challenging learning environment that encourages high expectations for success through development-appropriate instruction and classroom discipline that allows for individual differences and learning styles. We strive to have our parents, alumni, teachers, and community members actively involved in

[^99]our students' learning. Our vision is to be the state's leading school system. ${ }^{226}$

The problems with the EBRPS, according to proponents of the proposed city of St. George, were legion. They noted that some of the schools in the EBRPS had been taken over by the State of Louisiana and that $60 \%$ of the district's students had attended a school the state had regarded as "failing." In 2009 about $30 \%$ of the children living in the EBRPS had opted out of the public school system to attend private schools. ${ }^{227}$ A recent audit of the EBRPS by the Louisiana State Department of Education disclosed that at least 6 students from one of its high schools had been allowed to graduate without meeting all of the school's requirements, 11 students had been made eligible for state scholarship money without having met the applicable requirements, and between 2010 and 2013, about $25 \%$ of the transcripts of a random sample of graduating seniors had "significant errors," such as unearned credits, unearned grades and missing documentation. ${ }^{228}$ Proponents of secession posted an article on their web site describing the EBRPS as "a criminal conspiracy disguised as a school system," and "an effort to steal taxpayer money." 229

[^100]According to a study performed for the Baton Rouge Area Chamber of Commerce and the Baton Rouge Foundation, the new proposed City of St. George would look very different demographically from the remaining EBRPS. As currently configured, the EBRPS would be a Clintonland district with a large population of African-Americans. After the proposed split, the EBRPS would continue to be a Clintonland-type district with an African-American population of $55 \%$. St. George, with an African-American population of only about $24 \%$, would become one of the wealthiest cities in the state with average income about $\$ 30,000$ higher than in the EBRPS. The number of people receiving assistance from the federal Supplemental Nutrition Assistance Program (better known as "food stamps") in the EBRPS would exceed the number of people receiving similar assistance in St. George by 10 percentage points. (Richardson, Llorens, \& Heidelberg, 2013).

St. George would have an extremely well educated population: in the four key areas of the new city, the Village of St. George, Oak Hills, Shenandoah and Westminster, the percentage of the population holding at least a bachelor's degree is $47.05 \%, 56.36 \%, 46.65 \%$ and $62.75 \%$ respectively. While East Baton Rouge is a Democratic leaning school district, only Republicans represent the zip codes that serve the proposed City of St. George in the lower house of the Louisiana State Legislature. The proposed City of St. George would be a Goldwater Country district, and in light of that, it is hardly surprising that the proponents of the secession movement want to "take their business elsewhere," a sentiment that seems to echo the problems of the Cave Creek School District
discussed in Chapter 7. The project in St. George, at least with respect to the school system, is to move from Clintonland to Goldwater Country, and, once there, to create a school system as effective as the one in Madeira City, Ohio, also discussed in Chapter 7.

If St. George succeeds in seceding from the EBRPS, the older district's per pupil spending would fall from $\$ 9,635$ to $\$ 8,870$. Per pupil spending in the new school district, on the other hand, is projected to be about $\$ 11,686$. This is, in part because a major portion of the school system's operating budget comes from sales taxes generated by retail businesses that would be located in the proposed new municipality. (Richardson, Llorens, \& Heidelberg, 2013) As we saw in Chapter 5, for these kinds of communities, economic considerations are highly influential in determining whether a tax increase will be adopted. Here, not only will the residents of the remaining EBRPS continue paying the sales tax if they continue to shop at the stores located in St. George, they would receive no benefit for those taxes, which would be paid to the new municipality. They would have to replace that lost revenue by imposing a brand new tax. As in the Amherst Exempted Village School District in Ohio, that is likely to be a difficult thing to do for a community not blessed with affluence. "It's going to devastate us," said an EBRPS parent with 2 elementary school aged children. ${ }^{230}$ Said Carnell Washington, president of the EBRPS Federation of Teachers, if St.

[^101]George manages to secede from the EBRPS, "every affluent community in the state will want to create their own little school system."231

Whether proposing to secede from the EBRPS was a reasonable response to the school system's problems or, whether, as some have suggested, the proposal flows from concerns about issues of race and class ${ }^{232}$ is a discussion for another day. What is important here is that, if successful, the community of St. George will have been able to segregate itself and its children from an educational system destined to leave other people's children behind, just as the parents who had "voted with their feet" in the Cave Creek school district had apparently done. St. George's children will then be more likely than their former classmates in the EBRPS to get into good colleges, graduate and find jobs in an economy that rewards the skills and thinking abilities a college education makes possible.

And what will happen in the next generation? Surely it will be even more obvious to those children whose communities had seceded from the EBRPS than it was to people in the previous generation that a good education brings vast advantages in life. They will seek out communities where their children can be guaranteed the same opportunities that their elders gave them. They will surely choose to locate themselves in affluent communities that can control the quality of public education. But, what will they know about the lives of the others who

[^102]have been left behind; and what will the "left behinds" think of their former classmates, their education, their values and their sensibilities?

They might decide to raise families in communities that value education as they probably will value it. Consider, in this regard, the 24 California school districts included in this study. In 2011, California required a $2 / 3$ vote in order to pass a tax increase. Only 6 of the California school districts could not surmount that hurdle. In the California cases, the average percentage of voters in favor of increased taxes for the school districts that adopted tax increases was almost $70 \%$ compared to about $60 \%$ elsewhere in the country where the bar is set at only a bare majority. For these districts scattered randomly around California, to have been able to muster supermajorities in favor of increasing taxes for schools in such an economically difficult year implies that at least part of what attracted people to the school districts of which they were residents was the confidence that their neighbors would also be willing to make sacrifices for the sake of improving the chances of the next generation. It's not surprising that, on average, (i) all of the districts had above median home values, (ii) all but 2 were Democratic districts and (iii) about 50\% of the people living in the California districts that passed tax increases had college degrees compared to $38 \%$ of the people in the other California districts and $27 \%$ of the people in the dataset as a whole.

Segregation, whether based on educational attainment, wealth or political ideology, which together are elements of social class, cannot be a good thing for
our country, if for no other reason than the corrosive effect it is likely to have on the generalized trust required to help a society function (see Uslaner, 2012). Among its many problems, segregation has the potential to create divergent societies, perhaps not unlike the American factions that fought the Civil War, whose economies were different, whose societies were different and, ultimately, whose values were different.

But an educationally segregated country that reinforces segregation by class is not our only possible future. A system that arose out of a confluence of constitutional theory, ideology, practicality and the vagaries of American history can be replaced with something more efficient and more fair, assuming the presence of an appropriate amount of political will. Given the ability to start from scratch, would any country entrust a task as important to national survival as the education of its children to a patchwork system of school governance and finance that cannot guaranty that all of its children get the tools they need to become productive contributors to its future prosperity and security?

In the end, we probably cannot do much about the fact that some children are born to parents who are better able to nurture them than are other children, nor can we do much about the likelihood that these lucky children will have a better chance in the world of the $21^{\text {st }}$ century. But by making education a national responsibility, we can minimize those differences. In the process, we might be able to avoid the social estrangement and national disintegration that
may otherwise be our national future-but only if we, as a nation, are willing to tax ourselves.

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[^0]:    ${ }^{1}$ http://www.cbpp.org/cms/index.cfm?fa=view\&id=4213
    2 See, e.g. http://dailyreporter.com/2009/11/13/walker-targets-wages-andbenefits/; http://www.politifact.com/florida/article/2014/sep/05/rating-gov-rick-scott-his-campaign-promises/;
    http://bangordailynews.com/2012/12/07/news/lepage-pledge-to-end-bloated-state-government-remains-unmet/; http://www.teapartyplatform.com/Tea_Party_Movement_Platform.html

[^1]:    ${ }^{3}$ Wisconsin is a case in point. There, the successful gubernatorial candidate, Scott Walker, promised to cut pay for Wisconsin state employs to pay for a cut in the capital gains tax. http://dailyreporter.com/2009/11/13/walker-targets-wages-and-benefits/.

[^2]:    4 "Workers in cities at the top of the list [of cities ranked by labor productivity] make about two to three times more than identical workers in cities at the bottom, and the gap keeps growing."(Moretti, 2013, p. 4)

[^3]:    ${ }^{5}$ Recent research on the salience of political identity in other settings confirms Bishop's observation. Klofstad, McDermott and Hatemi, using a sample of internet dating profiles, found that both liberals and conservatives sought to date others who shared their political views and orientations. (Klofstad, McDermott, \& Hatemi, 2013) while Alford, Hatemi, Hibbing, Martin and Eaves found that "political attitudes display interspousal correlations that are among the strongest of all social and biometric traits."(Alford, Hatemi, Hibbing, Martin, \& Eaves, 2011) ${ }^{6}$ Because they depend on housing patterns, it is not unusual for school districts to span multiple counties.

[^4]:    ${ }^{7}$ This is why, in Ten Thousand Democracies: Politics and Public Opinion in America's School Districts, Berkman and Plutzer used simulated instead of actual public opinion data to study democratic responsiveness to public opinion.

[^5]:    ${ }^{8}$ Lentz's typology included the following categories: i) small rural jurisdiction; ii) residential suburbs; iii) mixed rural residential; iv) older growing jurisdiction; v) small cities.

[^6]:    ${ }^{9}$ By referring to them as the "Googleplex districts," I also mean to evoke the idea that not only do these districts tend to be heavily dependent on cutting edge thinking, but they are also highly cosmopolitan and diverse as is the population of Google's Mountainview, California headquarters campus.

[^7]:    ${ }^{10}$ By referring to them as the Smallville districts, I also mean to evoke the idea of small-town, rural America.

[^8]:    ${ }^{11}$ By referring to these districts as the Goldwater Country districts, I mean to evoke the idea that these districts tend to be staunchly conservative and reliably Republican areas.

[^9]:    ${ }^{12}$ In the earliest set of polls taken during the first Reagan administration when taxes and spending were under serious attack, only $39 \%$ of homeowners wanted to increase spending on education compared to $48 \%$ of renters. In the General Social Survey, $73 \%$ of renters wanted to increase spending on education compared to only $66 \%$ of homeowners; in the ANES survey $74 \%$ of renters wanted to increase spending on education whereas only $62 \%$ of homeowners felt the same way. Thus, even though there is a gap between the preferences of renters and owners, at least in the last two sets of polls, substantial majorities of homeowners preferred to spend more on education. If Berkman and Plutzer are correct about the correlation of taxing and spending preferences, the survey results imply that substantial majorities thought paying more in taxes for schools was appropriate.

[^10]:    ${ }^{14}$ It is difficult to say whether racial factors are solidary incentives or purposive ones. On the one hand refusing to raise taxes because of the belief that it will fund people who are not members of one's ethnic group may tap feelings of ethnic solidarity while, on the other hand, voting to increase taxes to benefit people perceived as outsiders may tap feelings of "noblesse oblige."

[^11]:    ${ }^{15}$ To address the possibility that statistical significance depended on the larger number of white voters compared to African-American and Hispanic voters, Bali used a random subsample of the white respondent group equal in size to the number of African-Americans and a random subsample equal in size to the number of Hispanic respondents. In both cases, the variables representing partisanship and ideology retained statistical significance while demographic factors did not.

[^12]:    ${ }^{16}$ Lentz's categories were based on "the traditional rural, suburban and urban classifications" (Lentz, 1999, pp. 462-63), each of which were further subdivided based on equalized assessed values of Agricultural, Residential and Business property. The resulting categories were Small Rural, Mixed Rural Residential, Older Growing, Residential Suburbs, Small/Midsize Cities, and Large Central Cities. There was only one city in Illinois-Chicago-that could be defined as a Large Central City, and so she was forced to exclude it from her study.

[^13]:    ${ }^{17}$ Because only Chicago met the criteria for Large Central Cities, she excluded it from her analysis.

[^14]:    ${ }^{18}$ Lentz found that "according to the correlation matrices, many of the independent variables used in the study appear to be highly correlated. The level of correlation, however varies depending on the community type. Some independent variables may be highly correlated in some community types and not in others." Lentz tested her equations for multicollinearity using Variance Inflation Factor and determined that her results were not affected by multicollinearity. (Lentz, 1999a, p. 471 note 24)
    ${ }^{19} R^{2}$ for the statewide equation was .185 . $R^{2}$ for the typology equations ranged from 0.254 to 0.48 .

[^15]:    20 "The five questions that have been included in ANES surveys since 1984 ask about ideological identification, government aid to blacks, government versus individual responsibility for jobs and living standards, government versus individual responsibility for health insurance, and the tradeoff between government services and taxes (Abramowitz, 2012, p. 51).
    ${ }^{21}$ I describe my method of classifying school districts later in this chapter.

[^16]:    ${ }^{22}$ I do not mean to suggest that migration is the only reason Americans may find themselves living in homogeneous school districts. From 1939 until about 1970, the U.S. reduced the number of school districts from over 100,000 to about 14,000 (See Berkman \& Plutzer, 2005, p. 20 Figure 2.1). For the most part, these consolidations took place so as to take advantage of the economies of scale that came from having a larger school district. Since 1970, though, school district boundaries have been relatively stable, and so it is more reasonable to think that in most modern cases, people have chosen to live in particular school districts and have not found themselves "gerrymandered" into undesired school districts by legislative fiat.
    ${ }^{23}$ Of course there are other ways to group districts. Marketing companies, for example, have been able to slice the American population into finer and finer classifications so as to

[^17]:    ${ }^{24}$ http://ballotpedia.org/Ballotpedia:About

[^18]:    ${ }^{25}$ The psychological theory of loss aversion holds that, people typically dislike losses more than they like equivalent gains.(see, e.g. Kahneman \& Tversky, 1984; Sunstein, n.d.). Thus, an election where people are asked to pay even a small amount of additional money is psychologically very different from an election in which people are asked whether they wish to continue an existing burden or receive a reduction in that burden.
    ${ }^{26}$ The partisan mix of Ohio cases is about equivalent to the partisan mix of the database excluding Ohio but it has twice as many cases in which the districts are below median in housing values. I am not concerned about this because my argument is that in accordance with Lentz, local effects, not state level effects control the outcome of school tax issues. For that reason, I am comfortable treating my cases as having been selected at random. To account for any state level effects, standard errors for each equation have been clustered.

[^19]:    ${ }^{27}$ To identify the people who represent each zip code, I used the Project Vote Smart web site (http//:www.votesmart.org) that allows people to find out who represents them at each level of government simply by entering a zip code.

[^20]:    ${ }^{28}$ The procedure I followed for adjusting median home values is described in some detail in Documentation for the NCES Comparable Wage Index Data Files, 2005.(Taylor, Glander, \& Fowler, 2007)
    ${ }^{29}$ Using the entire range of the variable, moving from the lowest home value in the dataset to the highest increases the probability of adopting a tax increase by almost $51 \%$.

[^21]:    ${ }^{30}$ The overwhelming majority of school districts in the database have majority white populations. In only 9 of the districts was the percentage of whites in the population below $50 \%$. Six of these majority-minority districts are in the Googleplex group where high levels of racial diversity is normal, and as I will show, not predictive of whether the community will adopt a tax increase. Four of these districts adopted tax increases. One of the districts with

[^22]:    white populations below 50\% was the only district in the Smallville group that had a majorityminority population (it adopted the tax increase) and the remaining two districts were in the Clintonland group (both rejected the tax increase) where, as I will show, economic considerations are more important.

[^23]:    ${ }^{31}$ The ACS does not have a variable that provides the level of adult education in the school district, but it does provide the numerical count of people who have attained the following levels of education: (i) did not graduate from high school; (ii) high school graduate without any college education; (iii) high school graduates with some college experience but not college degree; and (iv) college graduate. From these raw counts, I computed percentages

[^24]:    ${ }^{35}$ I have listed all of the school districts by these groupings in Tables 3A-1 through 3A-8, which appear as an appendix to this chapter.

[^25]:    ${ }^{36}$ This could account for the fact that the school districts in the Democratic districts have higher total enrollments than those in the Republican districts.

[^26]:    ${ }^{37}$ Table 3-6 shows that Republican districts had slightly more children than their Democratic counterparts. While the difference does reach statistical significance, the difference is not substantial.

[^27]:    ${ }^{38}$ The Bureau of the Census's eight "old" locality categories have been collapsed into these four categories as follows: (i) "Rural" includes all areas classified as rural regardless of whether they are inside or outside a CBSA/MSA; (ii) "Small Town" includes all areas classified as "small towns"; (iii) "Suburban" includes all areas classified as "urban fringe" regardless of the size of the city to which it is adjacent; and (iv) "Urban" includes cities, regardless of size.

[^28]:    ${ }^{39}$ According to Forbes Magazine, over 40\% of the Ph. D degrees awarded by American universities in 2011 in science, technology, engineering and mathematics went to people born outside of the U.S. (Wright, 2013)

[^29]:    ${ }^{40}$ The difference between the Clintonland and Smallville districts for this variable is not statistically distinct from zero.

[^30]:    ${ }^{41} \mathrm{p}=0.0 .21$ (one tailed)
    ${ }^{42} \mathrm{p}=0.038$ (one-tailed)
    ${ }^{43} p=0.000$ (one-tailed)
    ${ }^{44} \mathrm{p}=0.004$ (one-tailed)
    ${ }^{45} \mathrm{p}=0.0016$ (one-tailed)
    ${ }^{46} \mathrm{p}=0.069$ (one tailed)

[^31]:    ${ }^{48}$ For the Clintonland group, on average, according to ACS data, $60 \%$ of the workers in each school district are employed in low skill, "blue collar" type jobs such as production, transportation, construction, protective services such as fire and police and unskilled personal care.

[^32]:    ${ }^{49} p=0.0012$ (one-tailed)
    ${ }^{50} \mathrm{p}=0.0032$ (one-tailed)

[^33]:    ${ }^{51} \mathrm{p}=0.000$ (one-tailed)
    ${ }^{52} \mathrm{p}=0.001$ (one-tailed)

[^34]:    ${ }^{57} \mathrm{p}=0.000$

[^35]:    ${ }^{61}$ From Alternative Specification. See Appendix Table 4A-1
    ${ }^{62}$ Moving from the lowest level of the variable to the highest increases the likelihood of adopting a tax increase by 89.5\%.

[^36]:    ${ }^{63}$ In discussing the role of the university as an engine of economic development, Florida remarks: "Universities foster a progressive, open, and tolerant people climate that helps attract and retain members of the creative class. College

[^37]:    towns from Austin to lowa City have always been places where gays and other outsiders in those parts of the country could find a home" (Florida, 2012, p. 310). College graduates who seem to dominate this group of districts are likely to have picked up or reinforced the value of tolerance while in school.

[^38]:    ${ }^{64}$ As I will show in Chapter 7 in greater detail, the least educated Democrats are more enthusiastic about paying additional taxes in support of education than the best educated Republicans.

[^39]:    ${ }^{65}$ School district and precinct boundaries change from time to time, particularly after redistricting that comes as the result of a decennial census. I used the results of the Presidential election in which the precinct boundaries most closely resembled the precinct boundaries in the school district in 2011.

[^40]:    ${ }^{66}$ http://www.solarworld-usa.com/about-solarworld/locations

[^41]:    ${ }^{67}$ (http://www.usnews.com/education/best-high-schools/oregon/districts/portland-public-schools?int=61cf77)

[^42]:    68 http://www.portlandalliance.com/pdf/PBA-PGE-opinion-poll-summary.pdf ${ }^{69} \mathrm{http}: / / l w v p d x . o r g / f i l e s / p a s t-e l e c t i o n-a r c h i v e / v o t e r s-g u i d e-m a y-2011$
    ${ }^{70}$ www.portlandtribune.net/news/print story.php?story id=130565370675841800. Supporters of Learn Now, Build Later urged voters to vote in favor of the tax increase.
    http://www.oregonlive.com/opinion/index.ssf/2011/04/the_pps_bond_and_levy_le arn_no.html

[^43]:    ${ }^{71}$ http://lwvpdx.org/files/past-election-archive/voters-guide-may-2011

[^44]:    ${ }^{72}$ While majorities of both Democrats and Republicans, during tough economic times, favored an increase in public spending on education, there was a 20 point gap between the percentage of Democrats who favored increased educational spending and the percentage of Republicans who favored increased educational spending.
    http://www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/447/ctl/ReadCusto m\%20Default/mid/1508/Articleld/874/Default.aspx

[^45]:    ${ }^{74}$ http://www.sthelens.k12.or.us/site/Default.aspx?PageID=69

[^46]:    ${ }^{75}$ The party affiliations of the members of the Columbia City City Council were unavailable. The official canvas of votes does not identify candidates for these offices by party.

[^47]:    ${ }^{76}$ This rate had been scaled back from $\$ 1.50$ per $\$ 1,000$ assessed value. The school district apparently thought its chances of success would be better with a lower rate.
    http://www.thechronicleonline.com/news/local_news/article_9c541c8e-07e4-11e0-8daa-001cc4c002e0.html
    ${ }^{77}$ St. Helens School District Local Option Expenditure Plan http://sccchamber.org/Resources/Documents/LevyExpenditurePlan_4-11-11.pdf ${ }^{78}$ Unlike the Portland school district, regressing the percent in favor of a tax increase on percent vote for Barack Obama produced a statistically insignificant coefficient, though it is unclear whether this is the true impact of the variable or whether there were too few cases to support a bivariate regression model.

[^48]:    79 The correlation between the Presidential and school tax vote for precincts with average home values in excess of $\$ 200,000$ is 0.45 indicating that as support for the President grew so did support for the tax increase or that as support for the tax increase increased, so did the support for the President.
    ${ }^{80} \mathrm{http}: / /$ portlandtribune.com/scs/84-opinion/152241-for-st-helens-school-fresh-faces-and-new-energy-are-key

[^49]:    ${ }^{81}$ http://portlandtribune.com/scs/83-news/123127-voters-shoot-down-st-helens-police-levy

[^50]:    ${ }^{82}$ These are Democrats, after all. It is likely that as Democrat, the residents of these communities are likely to be characterized by "openness to experience," which is a "Big Five" personality trait normally associated with liberals. (Gerber, Huber, Doherty, \& Dowling, 2010; Gerber, Huber, Doherty, Dowling, \& Ha, 2010; Haidt, 2013, p. 142) People characterized by this personality trait "tend to be artistic, nonconforming, intellectual, aware of their feelings, and comfortable with new ideas" (Barondes, 2012, p. 18). These are precisely the kind of people who would have invested more of their lives in learning about new things and who would see education as a good in and of itself.

[^51]:    ${ }^{83} p=0.019$ (one-tailed)
    ${ }^{84} \mathrm{p}=0.014$ (one-tailed)
    ${ }^{85}$ Median age in the Adopter districts is about 3 years lower than in the Rejecter districts, $p=0.004$ (one-tailed), and the percentage of households with people 60 years old or older is about 2.4 percentage points lower in the Adopter districts, $p=0.027$ (one-tailed)
    ${ }^{86}$ Unoccupied housing units in the Adopter districts exceeded unoccupied housing units in the Rejecter districts by, on average, about 3.3 percentage points, $p=0.029$ (one-tailed)

[^52]:    ${ }^{87}$ Considering the full range of the variable, moving from the district with the lowest percentage of homeowners to the district with the highest percentage of homeowners decreases the likelihood of a tax increase by 81.1\%.

[^53]:    ${ }^{88}$ From Alternative Specification. See Table 5A-1 in the Appendix
    ${ }^{89}$ Because I had removed a variable from each of these models I could add in the Children variable without affecting statistical power or accuracy.

[^54]:    ${ }^{90}$ Rotated factor loading values range between 0.4652 and 0.76 .
    ${ }^{91}$ Survey by NBC News, Wall Street Journal. Methodology: Conducted by Hart and McInturff Research Companies, September 22 - September 26, 2010 and based on 1027 interviews. Sample: National adult.
    ${ }^{92}$ The mean feeling thermometer reading for Hillary Clinton was 62.95 , which is not significantly different from Bill Clinton's 63.35 feeling thermometer score.

[^55]:    ${ }^{93}$ It is possible that some people might not have seen John McCain as an appropriate representative of conservative policy. Substituting Republican feeling thermometer scores for McCain feeling thermometer scores does not materially change the results shown in Table 5-5.

[^56]:    ${ }^{94}$ Welch found that $48 \%$ of survey respondents who expressed a desire for increased local services were also willing to pay for them through increased taxation while $40 \%$ were willing to pay for the services they wanted by making realistic reallocations of local resources spent on other, unwanted services. "We have shown that the inconsistency of citizens wanting more for less, more services and less spending, probably is a paradox for only a minority. Most citizens are willing to raise additional revenue to pay for these services, or at least to reallocate from less desired to more desired services. Very few citizens think we can rely solely on greater efficiencies in government to pay for increased services, and only 12-22 percent seem to favor reallocation or intergovernmental aid in a way inconsistent with their preferences" (Welch, 1985, pp. 315-16).
    ${ }^{95}$ The attitude of Clinton Supporters toward increased spending on the poor and increased Spending on Services is puzzling. Given that the Clinton Supporters are significantly more likely to be white and less racially tolerant than the Obama Supporters, we should expect them to hold highly negative attitudes toward welfare spending, seeing it as a handout to blacks (Gilens, 2000). Instead we see a high level of support for increased welfare spending among Clinton Supporters when asked specifically about welfare spending, but a much less supportive response when asked generally about helping the poor or providing more social services in general. The correlation between responses to the spending on welfare question and the spending on the poor question is only $r=0.12$ for the dataset in general and $r=0.12$ for the Clinton Supporters. The implication is that Clinton Supporters are probably wary of generalized spending through programs with which they are not familiar but are generally willing to support programs they know and understand. Another possibility is that though median income for Clinton Supporters and Obama Supporters is about equivalent, according to the ANES, the percentage of Clinton Supporters worried about losing a job in 2008 was about 8 percentage points greater than that of the Obama Supporters worried about losing a job. If that is the case, then willingness to support welfare spending, conceived of as temporary aid rather than assistance to people who hold a particular status is an exercise in selfinterest: People who lose jobs are beneficiaries of increased government

[^57]:    $102 \mathrm{p}=0.041$.
    ${ }^{103} \mathrm{p}=0.001$ (one-tailed).

[^58]:    ${ }^{105}$ According to the Cuyahoga County tax assessor's office, most of the exemptions go to senior citizens.
    106 This data was available from the Cuyahoga County Board of Elections voter list.
    ${ }^{107} p=0.001$ (one-tailed), $R^{2}=0.2593$. Alone, the homestead exemption variable had an $R^{2}$ of 0.2427 .

[^59]:    108 http://cnsnews.com/news/article/spread-wealth-around-comment-comes-back-haunt-obama 109
    http://amherstohio.org/index.php?site=amherst\&ContentType=article\&articlenum =26\&menuitemid=140

[^60]:    110 http://webapp2.ode.state.oh.us/reportcard/archives/RC_IRN.ASP?irn=045195 111
    http://www.cleveland.com/opinion/index.ssf/2011/05/the plain dealer endorses amhe.html

[^61]:    ${ }^{112}$ For school tax elections, the tax rate is sometimes expressed in "mills," which are equivalent to $\$ 1.00$ per year for each $\$ 1,000.00$ in assessed home value. A one mill increase on a home assessed at $\$ 200,000$ would result in additional tax liability of $\$ 16.67$ per month.
    ${ }^{113}$ http://www.cleveland.com/opinion/index.ssf/2011/05/the plain dealer endorse s amhe.html.
    114 Ibid.
    115 http://www.morningjournal.com/general-news/20110112/amherst-schools-will-seek-money-in-may-for-rec-center-and-school-building

[^62]:    ${ }^{119}$ Precincts 1 and 3 have been excluded because Zillow provided no "Zestimates" for the dwellings within these precincts. Precinct 1 is composed of rental units and Precinct 3 is a trailer park.
    ${ }^{120} \mathrm{As}$ the trend line equations show, the slopes and intercepts of the lines are highly similar.

[^63]:    ${ }^{121} \mathrm{http}: / / \mathrm{www} . c b s n e w s . c o m / n e w s / t h e-p l e d g e-g r o v e r-n o r q u i s t s-h o l d-o n-t h e-g o p-~$ 29-11-2011/

[^64]:    ${ }^{122}$ Alexis de Tocqueville observed that

[^65]:    ${ }^{123}$ We should expect Republicans to value rootedness and respond favorably to it. As much as neophilia is a key psychological characteristic of liberals, neophobia is a psychological characteristic of conservatives:

    Conservatives . . . prefer to stick with what's tried and true, and they care a lot more about guarding borders, boundaries and traditions. (Haidt, 2013, p. 142)

[^66]:    ${ }^{124}$ My data will not allow me to say definitively whether households with seniors causes a Smallville group community to adopt a tax increase or whether stable communities that are likely to pass tax increases attract more seniors than communities that do not pass tax increases. My argument is only that large percentages of seniors is a characteristic of places likely to pass tax increases.

[^67]:    ${ }^{127}$ Using the American Community Survey's job titles, I include "Management, Business, Science and Arts Occupations," and "Sales and Related Occupations" as "white collar" occupations and all other occupations as "blue-collar" occupations. I considered office work that does not necessarily require at least a college education to be "blue-collar" work. This could also explain why there is less enthusiasm for education in the Clintonland and Smallville groups of districts than there is in the Googleplex Adopters group of districts. 59\% of the work force in the Clintonland group and $62 \%$ of the work force in the Smallville group hold blue collar jobs.

[^68]:    ${ }^{128} \mathrm{p}=0.035$ (one-tailed)

[^69]:    $129 \mathrm{p}=0.051$ (one-tailed)
    $130 \mathrm{p}=0.000$ (one-tailed)
    ${ }^{131} p=0.000$ (one-tailed)
    $132 p=0.001$ (one-tailed)
    ${ }^{133} \mathrm{p}=0.007$ (one-tailed)
    ${ }^{134} \mathrm{p}=0.034$ (one-tailed)
    ${ }^{135} \mathrm{p}=0.023$ (one-tailed)

[^70]:    ${ }^{136}$ From the Alternative Specification. See Table 6A-1 in the Appendix. In the Alternative Specification, the Homeowners variable reaches statistical significance, but its impact on the probability of adopting a tax increase in that model is less than half as significant as the impact of population size in that model.

[^71]:    ${ }^{141}$ Regressing the percentage of the vote in favor of a tax increase on the Seniors variable suggests that for every $1 \%$ increase in the percentage of households with a least one member who is at least 60 years old, the percentage of the vote in favor of raising the tax increases by 0.814 percentage points with $p=0.0015$ (one-tailed).
    142 The difference is $.018, \mathrm{p}=.0686$ (one-tailed).
    ${ }^{143}$ The correlations for the various kinds of districts are as follow:

[^72]:    ${ }^{145}$ As previously noted, Adopter districts do have a $\$ 6,700$ advantage in Adjusted Median Home value, which is about 6\% higher than Adjusted Median Home Value in the Rejecter districts.
    ${ }^{146}$ Here, I accept Bishop's premise that if given a choice, a Republican or a person who leans Republican is likely to prefer a Republican neighborhood like the ones in the Smallville districts over neighborhoods in districts that lean Democratic. Such potential homeowners are likely to be price constrained, and so they are not likely to be home shopping in the Republican quadrant with above median home prices.
    ${ }^{147} \mathrm{http}: / / g$ globalreportcard.org/. The measure I use averages, for each school district, mean math and reading standardized test scores scaled for national comparison.
    ${ }^{148}$ The ACS provides sufficient data to construct a variable that measures only the presence of homeowners who are at least 60 years of age. After swapping that variable for the one in the model that measures households with members older than 60 , the model fails to produce significant results for that variable regardless of whether the Owners variable is present.

[^73]:    $154 \mathrm{p}=0.034$ (one-tailed)
    ${ }^{155} p=0.006$ (one-tailed)
    $156 \mathrm{p}=0.0085$ (one-tailed)
    ${ }^{157}$ Considering the entire range of the variable, moving from the shortest median tenure (5 years) to the largest (19 years) improves the chances of adopting a tax increase by over $59 \%$.

[^74]:    158 Unless otherwise noted, all of Ms. DeJournett's comments are contained in correspondence, which I will make available upon request.
    159 http://www.dailystatesman.com/story/1705542.html
    $160 \mathrm{http}: / / \mathrm{www}$. dailystatesman.com/story/1705542.html

[^75]:    162 Support from the bank owners was apparently crucial. According to DeJournet, "The most influential organizers were the Miles family, who own the Bank of Advance. Though they keep a very low profile, the community knows that when they support a cause, it succeeds." 163 http://www.dailystatesman.com/story/1705542.html

[^76]:    165 http://www.fairborn.k12.oh.us/docs/Put\%20Fairborn\%20Kids\%20First.pdf 166 http://www.daytondailynews.com/news/news/state-regional-govt-politics/fairborn-rejects-79-mill-school-levy/nMrF7/
    ${ }^{167}$ Records of all assessed home values were available from the Green County Tax Assessor's Office for a nominal fee.

[^77]:    168 Unfortunately for the proponents of the tax increase, that precinct contributed only 12 votes in favor and seven opposed.
    ${ }^{169}$ As I pointed out in Chapter 4, we should expect a positive correlation between the school tax vote and the presidential vote when we expect less support for the tax as precincts grow relatively more conservative.

[^78]:    ${ }^{171}$ Here, I assume that people will register to vote shortly after moving into the community.
    172 29.45\% are Independents and 17.34\% are registered Democrats
    ${ }^{173} 64.75 \%$ are Independents and 8\% are registered Democrats

[^79]:    175 http://www.gop.com/our-party/our-history/

[^80]:    176 http://www.gop.com/2012-republican-platform_Renewing/
    177 The "Scholarship for Kids Act" would allow low income children and their parents to use a per capita share of federal money spent to pay for alternate education at a school of their choice. Sen. Tim Scott (R-S.C.) introduced another bill that would allow children with special needs to use a per capita amount of federal money set aside for special education to pay for tuition at an educational facility of their choice. Both bills are consistent with the 2012 Republican platform which provides: "The bulk of the federal money through Title I for low-income children and through IDEA for disabled youngsters should follow the students to whatever school they choose so that eligible pupils, through open enrollment, can bring their share of the funding with them." http://www.gop.com/2012-republican-platform_Renewing/

[^81]:    178 http://www.chattanoogan.com/2014/1/28/268393/Alexander-Proposes-11-Million-2100.aspx
    ${ }^{179} \mathrm{http}: / / w w w . g o p . c o m / 2012-r e p u b l i c a n-p l a t f o r m ~ R e n e w i n g / . ~ T h e ~ q u o t e d ~$ language comes from a segment of the platform entitled "Consumer Choice in Education."
    180 Ibid.
    181 http://www.gop.com/2012-republican-platform_Renewing/
    182 http://www.gop.com/2012-republican-platform_Renewing/

[^82]:    ${ }^{185}$ In this dataset, the variable used to measure diversity has an overall correlation of $r=-0.40$ meaning that as a jurisdiction gets smaller, its population gets less racially diverse.

[^83]:    $186 \mathrm{http}: / / \mathrm{www}$. gallup.com/poll/176846/americans-trust-local-governmentstate.aspx
    187 Internal political efficacy refers to "individual citizens' beliefs that they are competent to understand and take part in politics." It is "a psychological condition that many see as necessary for high-quality participatory democracy (Lassen \& Serritzlew, 2011, p. 238)."

[^84]:    ${ }^{188}$ Owners in the Smallville group of districts have lived in the same home for almost three years longer than the homeowners in the Goldwater Country group of districts.

[^85]:    ${ }^{189}$ I highlight here only the differences that my theory suggests should be relevant. In addition to educational attainment and population size, compared to the Rejecter districts, Adopter districts have adjusted median home values that are, on average about $\$ 61,000$ higher ( $p=0.046$, one-tailed), adjusted median income on average about \$5,000.00 higher ( $p=0.043$ one-tailed), and somewhat more than half as many students ( $p=0.025$ one-tail).
    $190 \mathrm{p}=0.012$ (one-tailed)
    $191 \mathrm{p}=0.019$ (one-tailed)
    $192 \mathrm{p}=0.02$ (one-tailed)

[^86]:    ${ }^{193}$ From the Alternative Specification. See Table 7A-1 in the Appendix.

[^87]:    194 Using the full range of the variable, moving from the lowest value for educational attainment to the highest improves the chances for passage by 76.8\%.
    ${ }^{195}$ Using the full range of the variable, moving from the lowest value for school district quality to the highest improves the chances for passage by $50.9 \%$.

[^88]:    196 http://www.madeiracity.com/

[^89]:    197 http://stateimpact.npr.org/ohio/2012/10/17/ohio-school-district-report-card-data-2011-12/

[^90]:    ${ }^{205}$ The correlation between Average Precinct Home Value and the vote on the school tax increase is only $r=0.13$. The correlation between Average Precinct Home value and the vote for Obama is even smaller in absolute terms at $\mathrm{r}=-0.10$.

[^91]:    ${ }^{206}$ Fitch's highest bond rating is AAA.

[^92]:    207 http://www.reuters.com/article/2012/07/23/idUSWNA176620120723
    ${ }^{208} \mathrm{http}: / / \mathrm{www} . l$ learnyes.org/index2011.html. According to the same flyer, the average home owner would have had to pay an additional $\$ 2.00$ per month. 209
    http://www.azcentral.com/community/scottsdale/articles/2011/05/26/20110526ca ve-creek-district-will-seek-november-override.html
    ${ }^{210}$ Maricopa County does not report school tax election results by precinct and so to make a valid comparison, I aggregated the results of the 2012 presidential election by polling place as well.

[^93]:    ${ }^{211}$ Wealth was also apparently played a large role in the school tax vote. The correlation between Average Precinct Home Price and the School tax vote was066. Wealth did not play a role in the presidential election. The correlation between the vote for president and Average Precinct Home Value was only $r=-0.07$. ${ }^{212} \mathrm{http}: / /$ datacenter.kidscount.org/data/Tables/7247-education-rank?loc=1\&loct=2\#detailed/2/11-19,2,20-29,3,30-39,4,40-49,5,50-52,6-
    9/false/36,868/any/14341. The Kids Count Data Center derived its rankings as follows:
    The Education Rank for each state was obtained in the following manner. First, we converted the 2011 (or 2009/2010, depending on the indicator) state

[^94]:    numerical values for each of the 4 key indicators within each domain into standard scores. We summed those standard scores in each domain to get a total standard score for each state. Finally, we ranked the states on the basis of their total standard score by domain in sequential order from highest/best (1) to lowest/worst (50). Standard scores were derived by subtracting the mean score from the observed score and dividing the amount by the standard deviation for that distribution of scores. All measures were given the same weight in calculating the domain standard score.
    ${ }^{213}$ https://www.blogger.com/profile/12372440689945085075. In the years leading up to the 2011 tax increase, the CCUSD Watch was often highly critical of the school district. It did, however, end up endorsing the tax increase. http://ccusdwatch.blogspot.com/2011/10/once-again-cave-creek-unified-students.html

[^95]:    ${ }^{219}$ The model shows that moving from the district with the lowest level of educational attainment to the highest increases the odds of adopting a tax increase by $34.47 \%$ if districts below one standard deviation from the mean and one standard deviation above the mean are excluded. Using the entire range of the variable, moving from the district with the lowest level of educational attainment to the highest increases the likelihood of adopting a tax increase by $76.84 \%$.

[^96]:    $220 \mathrm{http}: / / w w w . g a l l u p . c o m / p o l l / 147104 / D e m o c r a t s-R e p u b l i c a n s-D i f f e r-W i d e l y-~$ Taxing-Rich.aspx

[^97]:    ${ }^{221}$ Despite this language, a more conservative Supreme Court, in 1973, ruled that the Constitution did not require even rough parity in educational funding. San Antonio Independent School District v. Rodriguez, 411 U.S. (1973).

[^98]:    ${ }^{222}$ Growth in PISA scores apparently presages national economic growth. (Khaopa, 2011)
    ${ }^{223}$ The Common Core State Education Standards were developed by a group of states to improve and regularize education standards throughout the country. Of its project, the Common Core State Standards Initiative's web site says: "For years, the academic progress of our nation's students has been stagnant, and we have lost ground to our international peers. Particularly in subjects such as math, college remediation rates have been high. One root cause has been an uneven patchwork of academic standards that vary from state to state and do not agree on what students should know and be able to do at each grade level. . . The Common Core is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live." http://www.corestandards.org/about-the-standards/ It is telling that that there should even be any dispute that such an initiative is needed.

[^99]:    ${ }^{224}$ St. George is not an isolated example. Similar things have begun to happen in Alabama, Tennessee, Texas and Georgia. http://www.bloomberg.com/news/2014-02-06/baton-rouge-s-rich-want-new-town-to-keep-poor-pupils-out-taxes.html 225 http://www.stgeorgelouisiana.com/Why-How

[^100]:    226 http://www.stgeorgelouisiana.com/schools
    ${ }^{227}$ http://www.bloomberg.com/news/2014-02-06/baton-rouge-s-rich-want-new-town-to-keep-poor-pupils-out-taxes.html
    ${ }^{228} \mathrm{http}: / / \mathrm{www} . s t g e o r g e l o u i s i a n a . c o m / l a t e s t-n e w s / t h e-e a s t-b a t o n-r o u g e-s c h o o l-~$ system-is-basically-a-criminal-conspiracy
    ${ }^{229}$ http://www.stgeorgelouisiana.com/latest-news/the-east-baton-rouge-school-system-is-basically-a-criminal-conspiracy

[^101]:    230 http://www.bloomberg.com/news/2014-02-06/baton-rouge-s-rich-want-new-town-to-keep-poor-pupils-out-taxes.html

[^102]:    ${ }^{231}$ Ibid.
    ${ }^{232}$ http://www.huffingtonpost.com/2013/12/03/baton-rougesecession_n_4373865.html

