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TIEBOUT IN THE COUNTRY

The Inevitable Politics of Rural School Consolidation

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ABSTRACT—This essay explains why school consolidation issues are especially difficult in rural America. Consolidation is most appropriate when adjacent districts have similar preferences for taxation and spending on schools. In that case, economies of scale can be reaped without interfering much with resident preferences on taxes and school quality. In urban areas residents signal these preferences by moving into (or out of) school districts that match their preferences, a process known as Tiebout sorting. As a result, school consolidation decisions can be based on good information about resident preferences. The basic claim of this essay is that Tiebout sorting works much less well in rural areas for a variety of reasons. This means that consolidation decisions are based on thinner information; consequently, school consolidation is more contentious and political in rural America.

The essay then argues that, given this situation, a legislature interested in exploring rural school consolidation would do well to consider using legal and political processes that would enhance the ability of residents to express and record their preferences. Newer forms of political engagement that call on modern technology are available to do this and they may be effective in this context given the size and level of interest of the groups involved.

Key Words: rural schools, consolidation, Tiebout model, taxes, school quality, preferences

INTRODUCTION

School consolidations are efforts to find the “right” size for a school district. These are always difficult decisions. Schools are one of the most important goods provided by local government because they are highly visible, quite expensive, and greatly valued. And the size decision has the potential to affect virtually every aspect of a school and, in so doing, affect the kind of education children receive and the cost of providing it. But the decision extends far beyond the walls of the schoolhouse. In addition to defining who can attend schools and who must pay for them, a school district’s boundaries also define, and indeed create, a community.

This essay explains why school consolidation issues are especially difficult in rural America. Consolidation is most appropriate when adjacent districts have similar preferences for taxation and spending on schools. In that case, economies of scale can be reaped without interfering much with resident preferences on taxes and school quality. In urban areas residents signal these preferences by moving into (or out of) school districts that match their

preferences, a process known as Tiebout sorting. As a result, school consolidation decisions can be based on good information about resident preferences. The basic claim of this essay is that Tiebout sorting works much less well in rural areas for a variety of reasons. This means that consolidation decisions are based on thinner information; consequently, school consolidation is more contentious and political in rural America.¹

Drawing on this framework, the essay then explores ways in which the process of making rural school consolidation decisions could be improved. The general idea is that structures that provide incentives for residents to reveal their preferences are better than top-down directives. School consolidation decisions in rural America will always be contentious and political, but there are legal and political structures that might make them less so.

This essay begins with a description of the basic Tiebout model and how it operates to expose resident preferences about taxes and school quality. A consideration of how the model applies to school consolidation decisions follows. The first-order prediction of the model is that consolidation is more likely to occur as districts become more similar to each other. At the extreme, consolidation

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would permit districts with exactly the same preferences to reap economies of scale without interfering at all with those preferences. In rural areas, however, the Tiebout model is less likely to provide reliable information about resident preferences; rural residents move less often and, even when they do move, they are less likely to rely heavily on school quality in making their decisions. Finally, given the limits of Tiebout in the country, the essay proceeds to discuss ways in which rural school consolidation efforts could be structured to make up for this limitation. The primary suggestion is that legislatures interested in rural school consolidation should establish mechanisms to encourage or require better information disclosure, perhaps by calling on new forms of political engagement that use modern technology.

SCHOOLS AND THE TIEBOUT MODEL

In the early 1950s Charles Tiebout was a student in a graduate seminar on public finance offered by Richard Musgrave at Michigan. Musgrave, already one of the lions in the field, described for the class one of public finance's central problems: determining preferences for public goods. The general idea was that residents could not be excluded from enjoying the public goods offered by a locality, which meant that discovering preferences through pricing was unavailable and that residents had incentives to be strategically evasive if asked directly about their preferences. Based on this, Musgrave's position in the seminar (and in his publications) was that politics was the only mechanism available for determining the appropriate level of public goods (Musgrave 1939). As the story goes, Tiebout responded by proposing a nonpolitical alternative in an offhand, maybe even joking manner. His suggestion was that preferences would be revealed if localities offered different packages of public goods and residents revealed their preferences by moving to the locality that best met their preferences (Fischel 2006, 2). Some years later Tiebout presented the idea formally in his short, canonical piece, *A Pure Theory of Local Expenditures* (Tiebout 1956).

What I will call the Tiebout model—residents voting with their feet for their preferred package of local public goods—has been a dominant lens through which to view issues relating to urban and suburban schools.² And it has been an extremely powerful and useful lens. But the central thesis of this essay is that the lens is not very good for evaluating rural school consolidation. Instead we are closer to the original Musgrave hypothesis: that preference revelation is a serious problem and politics, for better

or worse, is the primary solution. Despite this it is possible to address the preference revelation problem by structuring the politics of rural school consolidation in certain ways. This essay will argue that rural school consolidation, while always controversial, could be somewhat more efficient and less stressful if more attention were paid to political structure.

First, let us consider the Tiebout model in its normal application as a way to discover resident preferences for school quality. The Tiebout story is that people have a choice of several localities in which to live, and an important consideration in making that choice is how good the schools are perceived to be. It is not uncommon for people seeking housing to try to identify good schools first and then to search for houses in that area. Information about schools is one set of data regularly provided by realtors (Waldeck and Glynn 2013). Moreover, when people are deciding where to live, if the schools in District A are better than the schools in bordering District B, then they will be willing to pay more for houses in District A. This will capitalize the extra value of the better schools into the price of houses in District A and the lesser value of the schools in District B into the value of those houses. It is not uncommon for similar houses sitting on boundaries such as those between District A and B to have 10% to 20% differences in price (Fischel 2009, 3). Tiebout sorting, then, is a mechanism by which people reveal their preferences for school quality. By moving into District A and paying the higher price, they are indicating that they are willing and able to pay the necessary premium for that better school.³

This, then, is the Tiebout model as normally applied. Communities offer a certain quality of school and people who value schools will sort into those communities. In urban America the basic assumptions of the model are true enough: urban areas provide a variety of communities from which to choose; all are within a reasonable commuting distance; home buyers tend to be aware of differences between schools in various districts; the population is relatively mobile; zoning provides a mechanism for communities to limit free riders; and so on (Fischel 2001, 58–71). The literature supporting the model is voluminous and highly sophisticated. This is not the place to provide a full-blown review (for a good recent review, see Nguyen-Hoang and Yinger 2011). Suffice it to say here that the Tiebout model is not perfect (What model is?), but it does a pretty good job of describing reality—or, as one clever commentator put it, the model does a good job of describing both *reality* and one of its oldest sayings about

what is important: location, location, location (Fischel 2001, 71). Maybe the saying should have been “Location, location, schools.”

The Tiebout model is primarily about decisions to live in one district or another, and the consequences of those decisions for housing prices and school quality. One of Tiebout’s original (but implicit) assumptions was that district boundaries were set endogenously, which would then permit people to choose between districts based on the packages of public goods and taxes offered.⁴ But this is an essay about school district consolidation; it is about how the boundary lines are set and reset, not about how people decide to move across them after they are set. Less work has been done on this issue and, as far as I know, no work has been done considering rural school districts specifically (Brasington 2003a, 2003b; Saiger 2010).

TIEBOUT AND SCHOOL CONSOLIDATION

Let us begin with a simple model of school consolidation. There are two neighboring school districts. Each provides a certain level of schools at a particular price to their respective populations. The two districts can remain separate or consolidate to form a single district. Consolidation requires a positive vote from both districts.⁵

The Tiebout model helps us to think about what kinds of factors might predict consolidation. The first-order prediction is that consolidation is more likely as the two districts become more similar. In the extreme, if the two districts were identical in their size, school quality, taxes, and so on (which would imply identical preferences by the populations), then economies of scale would favor consolidation.⁶ This implies that current trends toward more uniformity across a variety of dimensions (such as curriculum requirements and funding formulas) point toward more consolidations (Common Core n.d.; Nebraska Department of Education 2013; National Access Network 2013).

Another way in which districts may become more similar would be through changing demographics. The Tiebout model recognizes that each district will comprise people with differing preferences. This means that some subset of residents will always be dissatisfied. Indeed, the main moving part in the model—its main insight—is that dissatisfied residents will move from their district to another that better meets their preferences. This is the way in which residents reveal their preferences for a community’s proffered package of school quality and taxes. But as those residents move the median voter in the district may shift up or down.⁷ Obviously this could mean that the district moves further

away from neighboring districts in its preferred package of schools and taxes, but it could mean that it becomes closer to a neighboring district. Again, if it becomes close enough, economies of scale would support consolidation.

Tiebout recognized that moving between districts was costly and that this would affect the extent to which his model would reveal preferences (Tiebout 1956, 422). At the extreme, if it was always too expensive for residents to move from one district to another, then no preferences for schools and taxes would be revealed under the model. Tiebout cautioned against blowing this out of proportion because, as he rightly pointed out, every market has transaction costs. But he recognized that as this cost goes up, the less effective his model will be at revealing preferences (Tiebout 1956, 422).

The first-order prediction depends on economies of scale. But as school districts become larger in geographic size or more distant from one another, diseconomies of those types of scale may outweigh other economies of scale that might be created by consolidation. Thus a school district in Kimball County in western Nebraska may have residents with exactly the same preferences as a school district in Douglas County in eastern Nebraska, but the geographic distance between the two would undoubtedly overwhelm any other economies of scale that might be achieved through consolidation. This may also be the case with contiguous districts that are very large in geographic size.

Finally, school consolidation entails an issue beyond school quality that may function differently and more powerfully in rural areas. In addition to providing schooling, schools create communities. Rural districts may resist consolidation not so much because they fear that school quality will decline, but rather because they fear that their sense of community will deteriorate.⁸ This tends to be an especially powerful consideration in rural areas. In urban areas, if District A and B combine in the M metropolitan area, the M community is unchanged. The A and B communities will change but both still have their identities as members of the M community and both expect to survive in the new A/B District, even if in a somewhat different form. Things are often different in rural areas, where the school district and metropolitan areas are the same and the stakes are higher:

When death comes to a small town, the school is usually the last thing to go. A place can lose its bank, its tavern, its grocery store, its shoe shop. But when the school closes, you might as well put a fork in it. (Egan 2003)⁹

I do not mean to imply here that the community aspects of a school are not valued in urban areas; in fact, there is good evidence from Tiebout sorting that that type of value *is* attached to urban schools (see note 11). But the community aspects of schools are likely to be even more salient in rural areas where the number and variety of community attachments are fewer, thus increasing the relative value of school as community.

All of these factors indicate that the Tiebout process for revealing preferences will work less well in rural areas. First, the main moving part in the model is less likely to move in rural areas. In suburban America a resident can often signal her preference for a particular school quality by living on one side of the street or the other. In rural America the distances are much greater; hence the cost of registering the preference is higher, so the model works less well.¹⁰ Second, even when rural residents move they are less likely to be signaling their preference for school quality. In urban areas, again, the decision to live on one side of the street or the other may be primarily driven by perceived school quality; other factors, such as commuting time and access to shopping, are equal on either side of the street. In rural areas the converse is true. The locational decision is more likely to be driven by nonschool factors such as the location of the family farm, land prices, or the availability of work for migrant laborers. Moving to signal school quality is rare and difficult. Third, in rural areas, even if two adjacent districts are identical in their preferences for the school/tax tradeoff, the economies of scale that might be reaped by consolidation may be outweighed by the diseconomies of scale created by geographic distance. Finally, in urban areas, Tiebout sorting can also function to provide a measure of the extent to which a district's residents value the community aspects of a school.¹¹ But because of the other problems with the model in rural areas, that valuation signal is unavailable in the country even though the value placed on community is likely to be considerably higher in rural areas.¹²

Since all of these factors conspire against a well-functioning Tiebout model in rural areas, we simply cannot know much about resident preferences for school quality based on Tiebout sorting. This returns us to the Musgrave hypothesis—there is no quasi-market based way to determine rural resident preferences for school quality. Instead it is inherently a political process. This interferes with the consolidation process because it makes it more difficult to evaluate whether adjacent districts have similar preferences about school quality or the strength of each district's preference for the community-building aspects of their schools.¹³

TIEBOUT IN THE COUNTRY: THE LEGAL STRUCTURE OF RURAL SCHOOL CONSOLIDATION

As the preceding discussion indicates, determining preferences is a major problem in rural America. In particular, the Tiebout model, which does a decent enough job of revealing preferences in urban America, just does not work very well in the country. Given this, the principal goals in structuring rural consolidation efforts should be to encourage or require information disclosure and then to establish mechanisms to permit that information to be acted upon in a timely and reasonable way.

In general terms, there are only two ways to structure rural school consolidation efforts. First, the state (or some other higher authority, such as a court) can simply mandate consolidation. This approach has been used in Nebraska and Arkansas, among other places.¹⁴ Second, the state can create incentives to encourage rural school districts to consolidate voluntarily. This is another strategy that has been used in Nebraska (Blauwkamp et al. 2011, 5–6), as well as other places (see Rural School and Community Trust 2006; Remsen 2010).

MANDATED CONSOLIDATION

The first option—mandated consolidation—is an especially problematic structure in rural America. The reasons the structure is especially problematic in the country can be illustrated by comparing the problems there to two situations in which mandated consolidation might occur in urban America.

One situation in which mandated consolidation might occur in urban America is when Tiebout sorting works too well—that is, when it results in sorting on criteria that society has deemed to be improper or questionable. For example, boundaries may be drawn and maintained in ways that maintain racial or socioeconomic separation (Saiger 2010; Brasington 2003a).¹⁵ In these situations, if the racial or socioeconomic separation is found to be illegal, courts may order consolidation even if neither of the districts consents.¹⁶

In this situation Tiebout sorting may provide a good window into the value people place on the particular district boundaries and part of that valuation, by assumption, is based on preferences for racial or socioeconomic separation. Houses on opposite sides of the boundary might be priced quite differently. If consolidation is ordered, people on the high-value side of the boundary are likely to suffer capital losses as well as other disappointments.

There are two reasons that this type of mandated consolidation in urban America is distinguishable from and less problematic than mandated consolidation in rural America. First, in this type of urban consolidation the reason consolidation is required does not have to do with valuation at all. Instead society has determined that certain preferences, such as those based on race, are improper and should be disregarded.¹⁷ This situation (where the valuations are known but disregarded for important reasons) is quite different than a normal rural consolidation situation where the consolidation cannot be justified for reasons independent of school quality and tax valuations. In the urban consolidation situation mandated consolidation is required for a good, known, and identified reason (such as addressing racial segregation) independent of any evaluation of legitimate (nonracial) resident preferences. Moreover, even if the legitimate resident preferences were to be credited in this circumstance, they would be difficult to assess with Tiebout sorting or otherwise because they are so conflated with the illegitimate preferences. In the case of rural consolidation, in contrast, there are no disregarded preferences and, thus, no independent justifications for mandated school consolidation. The mandated consolidation will be justified based on valuations of school quality and taxes (broadly construed) or not at all.

Mandated urban consolidation in these circumstances is also less problematic than mandated rural consolidation because it is easier to escape the consequences. For better or worse, if residents subject to the mandated urban consolidation do not like the new school district, other options are available. For example, other districts may be available in the metropolitan area, or there may be private schools, or there may be a sufficient critical mass of parents to begin a charter school (Kruse 2007). None of these options for avoiding the effects of an unpopular decision are likely to be available with rural school consolidation.

Annexation is another situation in which consolidation might be required in urban America. By annexation I mean a situation in which there are two neighboring school districts, but one is much larger than the other. The classic case would be a growing city that has rapidly growing suburbs at its fringes. The city and a particular suburban district can remain separate or consolidate to form a single district. But in the annexation situation, consolidation requires a positive vote only from the larger district.¹⁸

The first-order condition discussed above indicates that if the two districts have the same preferences for school quality and taxes, then both would prefer consolidation because of economies of scale. The available

social scientific evidence suggests, however, that the size difference alone would result in the larger district being more inclined to consolidate and the smaller one being less inclined (Brasington 2003b; Ellingsen 1998). The question, then, is why an annexation system would permit the larger school district to absorb the smaller without the latter's consent and, indeed, even though the latter might be inclined *not* to consent.

Theoretically the question asks what effect the *relative* size of districts might have on the consolidation decision. There are at least two possible justifications for limiting the ability of the smaller district to block consolidation. First, the benefits of education may spill over positively into neighboring communities. Especially in an urban area, residents beyond the district's boundaries may enjoy benefits from good education through greater workforce productivity, a better-educated regional and statewide electorate, and a stronger regional community (Wyckoff 1984; Brasington 2003b). Since larger districts produce more of this externalized public good, smaller communities may attempt to free ride on it and, hence, resist consolidation. Thus, permitting the larger district to force consolidation is a way of addressing this free rider problem.

Second, the residents of the smaller district may be more concerned about dilution of their *political* power and status than they are about the school quality/tax tradeoff. In one sense this is a legitimate concern; their political power to influence educational policy in the future likely *will* be reduced once they are absorbed into a larger district. But in another sense it is an illegitimate, or at least an indeterminate, consideration. Viewed from the perspective of the entire metropolitan area, crediting this consideration would permit the minority in the small district to veto the will of the majority in the broader district. Placing the authority to make the consolidation decision with the larger district limits this veto option and is more likely to align with normal majoritarian principles (Briffault 1990, 356–82).

By reciting these justifications for annexation, I do not mean to imply that they are always persuasive. There certainly are countervailing factors. For example, the larger district may annex to exploit an adjacent small district with high property values and a low school-age population. And entrusting the larger district with the annexation decision permits it, and not the smaller district, to define the contours of the community created by the school district. But there are generally legal limits on the authority to annex that deal with the former problem and there is simply no good answer to the question of who should be entitled to define a community (Reynolds 1992).

But for our purposes the interesting part of this message is that, again, annexation is a situation in which Tiebout sorting may provide us with information about preferences in the two districts, but we choose to ignore it. That is, in our prototypical situation of an urban district absorbing an outlying suburb, it may well be that the smaller and larger districts have quite different preferences on school quality and taxes and that those differences are reflected well in property values. It may be that a house on the small district side of the current boundary is worth considerably more than a house on the large district side because of differences in school quality. If so, annexation may well result in a capital loss, and yet that is permitted, in part for the reasons discussed above. Thus, as with consolidations required for racial or socioeconomic reasons, annexations are situations in which valuation information may well be known, but it is ignored (or in this case, overridden) by other factors. This, again, is quite different from the situation with rural school consolidation, where there are no justifications for the consolidation decision *independent* of valuation and efficiency.

In sum, mandated consolidation seems particularly problematic in rural America. Mandated consolidation may make sense in some situations in urban America because the consolidations depend primarily on factors other than valuation, such as racial or socioeconomic equity. In contrast, in rural America, the primary concern driving consolidation is valuation and efficiency. As a result, valuation information is central. Mandated consolidation is especially problematic, then, because it does nothing to try to force preference revelation even though the decision is largely based on an assessment of those preferences; instead it requires consolidation in the absence of that information. It would be preferable to devise legal structures that provide a better informational base for making rural consolidation decisions.

VOLUNTARY CONSOLIDATION

The second way to structure rural school consolidation efforts is to create incentives to encourage rural school districts to consolidate voluntarily. The dividing line between this category and mandatory consolidation can be indistinct. Rural schools can sometimes be heard to complain that the incentives are so powerful that consolidation is the only possible option (Rural School and Community Trust 2006). It can be very difficult to determine when the incentives become that powerful, but when they do, regardless of the labels placed on the scheme, they flip from this category into the mandatory consolidation

category. However, there are also examples of very soft incentives. For example, under a recent Vermont statute, the only incentive was that “school districts must discuss merger with . . . contiguous districts, vote on whether to pursue a comprehensive analysis of merger, and report the results . . . to the commissioner of education and voters” (Remsen 2010). Despite these difficulties, in concept this category is clear enough—the voluntary consolidation category contemplates a legal structure that encourages consolidation, but does not require it.

To consider this situation, let us begin with a model of school consolidation that, although still bare bones, is slightly more complex than the one considered above. Assume again that there are two neighboring school districts, each currently providing a certain level of schools at a particular price to their respective populations. The state then acts to provide a certain set of incentives to consolidate. As before the two districts can remain separate or consolidate to form a single district. Since this is voluntary consolidation, the two districts would retain the authority to make this decision. We will also assume that we are operating in a Musgravian rather than a Tieboutian world—that is, all information about preferences on issues such as school quality and tax levels must occur through political voice rather than through the kinds of movements between school districts described by Tiebout.

This model conceptualizes the voluntary consolidation process as a repeated two-stage game. First the state acts to announce the consolidation incentives. This would normally be done by the legislature which, as described below, would have to choose among many possibilities. Once the incentives have been set by the legislature, school districts would decide whether to consolidate or not based on that set of incentives. At this second stage of the process, it could be that many school districts decide to consolidate or that few or none do. This two-stage process could be repeated: in a subsequent legislative session, the legislature may act again to establish a new set of incentives, which would restart the process. In a Tieboutian world, this repeated two-stage process may work acceptably because Tiebout sorting provides a great deal of information to both the state and school districts about the preferences of residents on schools and taxes. The problem in a Musgravian world is that those preferences are not known and, by itself, this process does little to create the kinds of information that are necessary to make good decisions.

Consider first the decision of the state in setting the consolidation incentives. Again the problem in a Musgravian world is that the state has to set these incentives

without much information. This problem is heightened because the incentives can be set in a wide variety of ways. For example, states might establish incentives through reduced funding for certain categories of districts, through financial bonuses for districts that consolidate, by increasing curricular requirements that are difficult for smaller districts to meet, by increasing teacher credential requirements, by establishing certain student transportation rules or funding schemes, by imposing limits on distance learning, by imposing certain capital requirements, and so on (Rural School and Community Trust 2006). At the first stage in this two-step process the state will set all of these parameters explicitly or implicitly. There are literally thousands of possible configurations of consolidation incentives. But the state can choose only one set of incentives out of all those possibilities.

The second stage, then, will be for each set of rural school districts to evaluate the one set of incentives proffered by the state and then to choose whether to consolidate. It could be that no school districts decide to consolidate or that many do.¹⁹ But the information provided by the second stage will be limited: given this particular set of consolidation incentives (out of the thousands theoretically available), we know that X school districts will agree to consolidate and that Y school districts will choose not to consolidate. Since this is a repeated two-stage game, the state will then be able to rely on this limited set of information to recalibrate its consolidation incentives for the second round. And the process starts again.

Given the limits of Tiebout sorting in the country, efforts to encourage voluntary school consolidation should be structured differently than this with the goal of encouraging more and better information disclosure, followed by a process which permits consolidation decisions to be made based on that improved information.

Let us think first about the second stage of the process. Each school district is provided with a set of incentives and is then given an opportunity to decide to consolidate or not. Consider possible ways in which a fuller information base could be developed. First, following the Vermont statute, rather than merely being offered a set of incentives, school districts could be required affirmatively to consider consolidation (Remsen 2010). This would mean that a more complete and representative set of districts would provide reactions to the incentives, even if the ultimate signal remains merely a yes or no to consolidation. Without forced consideration one would not know if a nonconsolidating district simply failed to think much about the issue or whether it had thought about it seriously and rejected it. Forced consideration would ad-

dress that informational limitation.²⁰ In addition, requiring each district to talk to at least one other district about consolidation would produce more, better, and more representative *cross-district* information.

Second, school districts could be required to engage in a process that would provide even more information about the reasons for their consolidation decision. Since we are talking about *rural* school consolidation, the populations involved would be relatively small and the interest and motivation to participate would probably be quite high. This would mean that techniques could be employed that would extend beyond the district leadership (such as the superintendent and school board) to gather information at a more grassroots level. Many possibilities are available. Traditional general-invitation town halls are one possibility, but more modern and innovative techniques may be even better at discovering true preferences.²¹ For example, deliberative polling is a structured process to discover and shape public opinion that would likely work well in small, rural communities.²² Similarly, more statistically based “idea pageants” are a way of exploring the types of trade-offs preferred by a population (Marinovic et al. 2011). There are many other possibilities and variations (Hanson 2007; Hahn and Tetlock 2005, 2006). In the abstract, it is difficult to know which particular preference-revealing strategies might work best for rural school consolidation.²³ But the general point here is that techniques are available that could be used to uncover much more information about a district’s preferences than a mere up or down vote on consolidation by the school board.

The advantages of requiring targeted local school districts to engage in a preference-revealing process like this flow in several different directions. First, the process would help the school district population itself discover and explore its own preferences. A well-designed process would provide more information about the decision to be made and structure and encourage a productive discussion. In the absence of a process like this, opinions are likely to be formed on a thinner information base and with fewer discussions across various community divisions (such as religious or ethnic divisions). Second, and similarly, the school board may find that the views it has formed through informal contacts and the normal political process are confirmed through a more informed and broader deliberative process. Or it may discover that some of those views should be revised. In either event, it could be more confident that its decision, whatever it is, is more data-based and closer to the popular will. Third, the accumulation of the information from these processes could be gathered to help inform the state when it considers its

options for the next round. As indicated above, the state's consolidation offer can be configured in multiple ways. The kinds of information gathered through these processes can assist in the configuration for the next round. I will discuss this further below. Finally, there is good evidence that deliberative processes like these increase trust and confidence in governmental decision-making (Tomkins et al. 2010). Thus, even if every consolidation decision turns out to be exactly the same with or without deliberative processes like these (which would, of course, be impossible to know), the process itself may produce important benefits. These benefits may be especially important in an era when trust and confidence in government is at historically low levels. This may be especially important when the issue at hand is rural school consolidation. This is an issue that is especially likely to undermine mutual trust and confidence in government. In particular, rural school districts may be especially distrustful of both the state and its initial offer and of other, neighboring school districts. In this context some level of distrust like this is inevitable. But, again, a well-designed deliberative process should help to minimize the distrust and skepticism.

Let us turn our attention back to the first stage of the two-stage process: development of the consolidation offer from the state. Again this is a repeated two-stage game, so we are thinking about the first stage after at least one second stage has already occurred. The information from a preference-revealing process at the second stage can be used productively to inform the next first-stage offer. For example, the state might discover that carrots such as financial incentives to consolidate were viewed much more favorable than sticks such as state aid reductions for schools that did not consolidate (Dari-Mattiacci and de Geest 2010). Or it might find that school districts might be more willing to replace cutbacks to transportation subsidies to ensure shorter bus rides than they are to replace reductions in state support for other kinds of district expenses. Or it may find the opposite on both these dimensions. In any event the new information can help inform the next consolidation offer made by the state.

There are at least two ways in which the first-stage process can be organized to facilitate better use of the new, richer information gathered at the second stage. Both involve administrative processes. First, if the second-stage processes work, there will be a great deal of new data and much of it will be difficult to interpret. The information could be put to better use at the first stage if someone is assigned the task of organizing and analyzing it. The legislature itself, given the demands on its time and resources, is poorly positioned to do a good job of this it-

self. Thus the information would be better used if the task of using the new information to develop a new legislative offer were assigned to an agency. Because rural school districts are likely to have some level of distrust of such an agency, it is important to structure the agency and its processes in ways that will build rather than undermine trust. For example, structuring the agency to be multi-member and representative would probably be preferable to having a department with a single head. Similarly, this may be the type of situation in which nonstandard administrative processes, such as negotiated rulemaking processes, could be used to help build trust (See, e.g., the 2012 Negotiated Rulemaking Act [5 USC §§ 561 et seq.]).

Second, there is little reason to think that each rural school district will weigh each component in the legislature's consolidation offer in the same way. Some may be more interested in capital construction issues, others in transportation issues, others in teacher credentialing, and so on. Thus, any consolidation offer that is uniform and informed by the legislature's best estimate of the marginal preferences of the marginal district is destined to be inferior to offers that could be more finely calibrated to individual districts. This points to agencies again. If one of the goals is maximizing preferences across a number of diverse school districts, then one could get closer to that goal if an agency were provided ranges on a variety of the relevant parameters (such as transportation subsidies, capital investment rules, or teacher credential rules) and given the flexibility to adjust each parameter to match district preferences more closely. This would, of course, be a difficult process, but avoiding difficulty is not possible with rural school consolidation. The issue would be whether this type of administrative matching process would be more or less difficult and effective than a one-size-fits-all consolidation offer. To ensure sufficient trust on the part of rural school districts to permit such a system to work, a properly structured agency and thoughtful administrative processes would be crucially important.

In sum, the basic problem with voluntary rural school consolidation is that we are living in a Musgravian world in which it is difficult to discover true preferences. There are no perfect solutions to this problem. But it may be possible to develop legal and political structures for dealing with rural school consolidation that do a better job of preference revelation.

CONCLUSION

Rural school consolidation efforts are especially fraught in part because information about resident preferences

regarding school quality and taxes are so hard to discover. The Tiebout process that works moderately well to provide that type of information in urban America just does not work very well in the country. As a result, the process occurs in a Musgravian world in which the information can be uncovered only through political voice. In light of this, if a legislature is interested in exploring rural school consolidation, it would do well to consider using legal and political processes that would enhance the ability of residents to express and record their preferences. Newer forms of political engagement that call on modern technology are available to do this, and they may be effective in this context given the size and level of interest of the groups involved. At the least they may be worth a try both to permit real-world evaluation of these techniques and, more specifically, to see whether they would be effective in addressing the special problems of rural school consolidation.

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NOTES

1. I use the word “political” here in a technical sense. Although the word has acquired a pejorative tone in recent years, I do not use it in that way at all. Instead, following Hirschman’s classic formulation, I use the term to mean that rural consolidation issues are more likely to be sorted out through political “voice” rather than through Tieboutian “exit” (Hirschman 1970).

2. One of the leading researchers on American schools has said that the Tiebout process is “the most powerful force in American schooling” (Hoxby 2000, 1209).

3. Because this is an essay about school consolidation, I will often simplify the decision set for residents as one involving school quality and taxes. Obviously the set is much broader and more complicated than that.

4. Tiebout recognized district formation as a problem. He noted that unless a “sociological variable” were included in his model, the model could be perfectly solved if there were a separate municipality for each person, which would be absurd (or, as he put it, “trite”) (Tiebout 1956, 421). But, despite this, he did not attempt to incorporate these “sociological” variables into his model.

5. Some obvious complicating factors have been stripped from this model to keep it simple. For example, consolidation contemplates a wholesale integration of the two districts. Instead of that, the two districts could engage in a more fine-tuned collaboration by contracting to share only certain func-

tions. This would complicate the model by moving from an all or nothing choice set (consolidation or not) to a much broader choice set with many possible levels of consolidation. This is obviously a possibility; Nebraska’s educational service units and the Learning Community of Douglas and Sarpy Counties are local examples of such, more fine-tuned collaborations (See Rural School and Community Trust 2013; Deloitte 2005). But those complications are for other articles; the goal in this short essay is to keep the model simple and manageable.

6. One study found that in the mid-1990s, consolidations in New York reduced costs per pupil by 28% for a 300-pupil district and by 9% for a 1,500-pupil district (Duncombe and Yinger 2005). See also Cogswell (2009, 66), who finds that the average per-pupil cost in a set of Nebraska small schools was 18.6% higher than the state average between 2003 and 2006. But see Dority and Thompson (2013), who did not find consistent evidence that consolidation lowered per pupil monetary costs, in either rural or non-rural districts in Nebraska.

7. In theory a district’s preferences reflect those of the median voter (Bergstrom and Goodman 1973).

8. If consolidation is possible, the first-order condition would imply that preferences about school quality are similar.

9. This article in the *New York Times* used Superior, Nebraska, as its primary example. I do not mean to imply here that the community aspects of a school are not valued in urban areas; in fact there is good evidence from Tiebout sorting that that type of value is attached to urban schools. See note 11, below. But the community aspects of schools are likely to be more salient in rural areas where the number and variety of community attachments are fewer, thus increasing the relative value of school as community.

10. Some states and districts have implemented open enrollment policies that enhance the ability of residents to signal their preferences. These policies permit residents to choose any school within a district or even across districts (McClure-Hartman 2012). But these types of open-enrollment policies are not very effective at signaling preferences in rural areas. First, many rural districts have only one elementary school and one high school, so intra-district open enrollment is simply unavailable as a mechanism to signal preferences. Second, even where possible (for example, through inter-district open enrollment), the distances involved in rural areas raise the cost of making the choice, so the signal about school quality is much weaker.

11. For example, there is some evidence that home values in good urban school districts are “too high” relative to the value added by the schools. This overcapitalization could be explained by the extra value residents see in the types of communities that form around those good schools (Bayer et al. 2007; Rothstein 2006). Similarly, one explanation for why residents without children tend to support public schools is that they value the benefits they receive from the communities that are formed by those attracted into good school districts through Tiebout sorting (Fischel 2009). Alternatively, it could be that residents without children are just really interested in maintaining the value of their houses. (Hilber and Mayer 2009).

The notion that good schools can create good communities can help to explain observations like these that would be fairly puzzling otherwise.

12. All of the factors discussed in this paragraph depend on an admittedly rough distinction between rural and urban areas. But, of course, the distinction between the two is not sharp (Morrill et al. 1999). Consequently, Tiebout sorting may work reasonably well in some rural areas and not very well in some urban areas, depending on the particular circumstances.

13. Note that it is not only difficult for state officials to evaluate these types of preferences, but it is also difficult for the rural residents themselves to evaluate them. As a result, the necessarily political process for sorting them out creates pressure *within* rural school districts as well as between those districts and state officials.

14. In 2005 Nebraska required all Nebraska school districts to offer grades from kindergarten through high school. In effect, this required all Class 1 districts (those with only elementary schools) and Class 6 districts (those with only high schools) to consolidate with neighboring districts. The law was later overturned by referendum, but not before many districts were consolidated (Blauwkamp et al. 2011, 4–5). In 2004, Arkansas enacted a law which required 57 school districts with fewer than 350 students to merge with neighboring districts (Jimerson 2005).

15. The prototypical cases involving racial separation are the desegregation cases deriving from *Brown v. Board of Education* (347 US 483 [1954]). The prototypical cases involving socioeconomic separation are the school finance cases (Thro 1990).

16. As above, this description of the situation is simplified to facilitate discussion. The real world is much more nuanced. For example, inter-district remedies are permissible only if an inter-district violation is shown (*Missouri v. Jenkins* [515 US 70 (1995)]). The school finance cases are, by their nature, inter-district; the desegregation cases, on the other hand, are more commonly intra-district. For an inter-district desegregation case, see *United States v. Yonkers Board of Education* (624 F. Supp. 1276, *aff'd*, 837 F.2d 1182 [1985]). Similarly, in both desegregation and school finance cases, when they find violations, the courts are more likely to order a remedy other than full consolidation, such as the establishment of magnet schools or busing or transfer programs in desegregation cases, *Liddell v. Board of Education of City of St. Louis* (126 F.3d 1049 [1997]), or new state funding schemes in school finance cases. Despite this, consolidation is one of the possible remedies in these cases when inter-district violations are found.

17. Disregarding preferences is not an uncontroversial topic in itself. But it is one beyond the scope of this essay (Sunstein 1986; Elster 1983).

18. This is a limited definition of annexation designed to permit exploration of certain issues. The definition is a very abstract description of some annexation systems, but these systems vary greatly across the country and some require the consent of both districts. Compare, for example, *Hamilton v.*

Country Board of Education of Johnson County (265 S.W.2d 873 [1954]) (discussing Arkansas law which required only the consent of the larger district) with *Live Oak County Board of School Trustees v. Whitsett Common School District* (181 S.W.2d 846 [1944]) (discussing Texas law which required an election of all those to be included in the combined district) with *Southern Pacific Co. v. Maricopa County* (107 P.2d 212 [1940]) (discussing Arizona law which required consent of both districts). In general, the state has plenary authority to decide the procedures required for annexation (Schools and School Districts [Corpus Juris Secundum, § 18 (2012)]).

19. It is worth noting that this process provides a bias against consolidating. School districts are generally permitted only a choice of consolidating or not consolidating. A deconsolidate option is generally not available.

20. Forced consideration, without dictating a particular result, has been used in other areas successfully (National Labor Relations Act [29 USC §§ 151–69], 1935, § 8[§158](a) (5), 8[§158] (b)(3) [imposing a duty to bargain on unions and employers]).

21. General invitation public hearings have been used commonly by school boards considering rural consolidation. Ironically the social scientific evidence is that such hearings tend to increase polarization rather than to lead to consensus. More innovative techniques have been found to be better for exploring preferences (Glaeser and Sunstein 2009; Schkade 2007).

22. This is a technique developed by Professor James S. Fishkin at Stanford University, and described on his website:

A random, representative sample is first polled on the targeted issues. After this baseline poll, members of the sample are invited to gather at a single place for a weekend in order to discuss the issues. Carefully balanced briefing materials are sent to the participants and are also made publicly available. The participants engage in dialogue with competing experts and political leaders based on questions they develop in small group discussions with trained moderators. Parts of the weekend events are broadcast on television, either live or in taped and edited form. After the deliberations, the sample is again asked the original questions. The resulting changes in opinion represent the conclusions the public would reach, if people had opportunity to become more informed and more engaged by the issues. (Fishkin 2013)

23. Researchers are beginning to explore which preference-revealing strategy might work best for what purposes (PytlíkZillig and Tomkins 2011). A great deal of expertise on these types of issues is locally available at the Public Policy Center at the University of Nebraska.

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