Fiscal Zoning and Economists' Views of the Property Tax

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This essay was written while I was on a sabbatical leave from Dartmouth in 2012-13 with substantial additional support from the Lincoln Institute of Land Policy. It is scheduled to be a chapter in an extensively revised version of my 1985 book, *The Economics of Zoning Laws.* The revision, to be published by the Lincoln Institute, is still underway, so comments that readers email to me can be incorporated in it.

Abstract: Fiscal zoning is the practice of using local land-use regulation to preserve and possibly enhance the local property tax base. Economists agree that if localities can conduct "perfect zoning," which effectively makes all real estate development decisions subject to a review that balances its benefits and costs to the community, then the local property tax can be converted into a benefit tax and lacks the deadweight loss of taxation. This essay argues that American zoning is closer to this ideal than many other economists think. The practice is often difficult to detect because zoning serves several objectives besides fiscal prudence.

§1. ORDER WITHOUT ZONING?

Zoning and related land-use regulations began in the United States early in the twentieth century and spread rapidly (Raphael Fischler 1998). Almost all American urban municipalities and counties now have zoning regulations. The question for this essay is how much traction does zoning actually have? A counterexample may put this in perspective. In a famous article, Ronald Coase (1960) used cattle trespass as a hypothetical example of the effect of legal rules. In rural areas where both cattle ranching and crop farming are viable, cattle must be kept from invading cornfields and other areas that might attract them. Two rules to control the animals are available. Ranchers can put up fences to keep roaming cattle out of fields (or actively herd them to accomplish the same goal), or farmers can put up fences around their crops to keep out cattle. Coase's objective in his article was to show that it did not matter for economic efficiency whether the farmer was legally obliged to fence out cattle or the rancher was legally obliged to fence them in. If initial legal liability can be reassigned voluntarily and deals are easy to make and enforce, the same result will occur regardless of who has the initial entitlement.

I have in other work applied Coase's argument to apply to bargaining between developers and municipal officials who control zoning (Fischel 1985), but right now I will point to a different issue that Robert Ellickson raised. Maybe the legal rules—fence in or fence out—do not actually govern cattle trespass. Ellickson did field research in Shasta County, California, where legal rules had recently been changed so that owners of free-roaming cattle had to be fenced in. He found to his surprise that the legal rules did not matter much at all. Traditional ranchers and their neighbors adhered to self-generated rules of behavior that required, in a nutshell, that ranchers always take care of their animals, regardless of the law, and that victims of cattle trespass almost never resort to legal remedies. Ellickson expanded his inquiries into the relevance of property law in other dimensions and produced a now-classic book, *Order without Law* (1991).

§2. PROPERTY TAXES AND DEADWEIGHT LOSS

So does zoning actually control private land-use decisions, or is it, like cattle trespass law in Shasta County, just an appendage that only crops up occasionally? The particular issue examined in this essay is whether zoning allows communities to control the composition of its property tax base. Here is a brief explanation of the relevance of that question. Economists in the tradition of Henry George (1879) have argued that a tax on land is a better tax than general property taxes. Higher tax rates on land do not cause owners to remove it from the jurisdiction or modify their decisions about how to use it.

Of course a higher tax rate on land will make owners of land poorer (assuming they had not anticipated the higher rate before they bought the land), and their poverty might cause them to do less of what they had been doing before. Unhappy landowners might decide to sell their land in that case, and the buyers would pay a lower price for it as a result of the higher annual tax burden. But the buyer's decision about what to do with the land will not be affected by the tax. If constructing and operating a medical office was the ideal use for the land (it's near a hospital), then the same office will be built regardless of how much the land was taxed. This assumes that the tax rate is applied strictly to the land's location value and not to some hidden capital or human effort, and that the tax is not so high (in excess of 100 percent) that the owner abandons the property.

Now consider a tax that generates the same revenue as the land tax but is applied only to structures themselves. The owner of the raw land in this case sees that her tax depends on how big a building she puts up. Instead of erecting the medical building, she uses the land as a parking lot, which has lower value and lower revenues. The medical office (if one is built at all) might be built in another jurisdiction that has lower taxes on buildings.

The economic loss from using land less intensively than is optimal (as the medical building was assumed to be) or pushing activities to less efficient locations (as the displaced medical building was, as it requires longer trips to visit the hospital) is called the deadweight loss of the tax. (Deadweight loss is sometimes called "excess burden.") The tax revenue itself is not a deadweight loss, since what one party (the taxpayer) loses the receiving party (the government) gains and can use to finance public goods. The deadweight loss is a cost that is a lose-lose situation: the taxpayer does not get her building where she wants it, and the government does not get as much tax revenue from a parking lot. (For a real life example of deadweight loss, see the example in section 7 below about "hairy cattle.")

Urban planners might wonder how much difference deadweight loss matters for urban form. The answer is that public finance and urban form are closely related. For one thing, an anemic tax base—one easily avoidable and hence laden with deadweight loss—will be unable to finance the urban public services that support well-planned cities. For another, property-tax avoidance often makes for obviously bad planning. Medical office buildings ought to be built near hospitals, not miles away just to reduce property tax payments. Economic efficiency and sound urban planning are often corresponding principles.

§3. INCENTIVE-COMPATIBLE PROPERTY TAXES

How might communities overcome the economic and planning distortions of a property tax on buildings? A land tax is an obvious answer, but land taxes in the United States are seldom used, perhaps because of the administrative costs of separating the value of land from the value of improvements (Daniel Holland 1970). The impatient reader might ask, why tax real estate at all? Why not have a local sales or income tax instead of any tax on buildings or land? Then the owners of land could make development decisions without the distorting taxes on building and without assessors having to guess about the difference in value between land and structure. Indeed, the impatient reader's question mirrors critics of the local property tax such as Robert Strauss (1995), who proposes that it be replaced by other taxes that are more closely related to ability to pay and less cumbersome to administer. Given the property tax's unpopularity and the availability of voter initiatives, one would expect the local property tax to have disappeared by now.

Yet the property tax survives. (Section 14 below addresses California's famous property tax revolt.) One reason is that taxation of property is incentive compatible, to use an economic term that actually means what it sounds like it means. Taxation of local property provides the right incentives for those who decide how much to tax, what to spend the revenue on, and how generally to govern (and zone) the community. Public decisions under local property taxation are more efficient because the decision makers (ultimately, in my view, the voters) have to think about the consequences for all property values within the community, not just a single lot (Edward Glaeser 1996). Because the property tax base is long-lasting and difficult to remove once in place, property taxation also induces decision makers to think more about the future than they would with a sales or income tax.

Consider a jurisdiction that has a sales tax instead of a property tax. It must decide whether a commercial zone should have office buildings or shopping centers. The office building is presumed to be better because it adds more value to the land and because it is less annoying to neighbors, having less traffic, noise, and odors than a shopping center. Under a property tax regime, the office building would have obtained zoning approval. But if sales taxes are the main source of local revenue, the shopping center has a better chance of being approved, even though it is less valuable and has the effect of reducing nearby residential property values, because the center generates more sales tax revenue (Paul Lewis 2001). Of course neighborhood protest at the zoning and planning hearings might forestall the shopping center, but residents in parts of the community not near the proposed center would generally be

in favor of something that added to the local treasury. This is true also for a property tax, but the net gain to the rest of the community from the less-desirable shopping center would be smaller because of the devaluation of nearby homes.

Property taxation without zoning does not work very well. A history of zoning in Weston, Massachusetts, one of the tonier and more stringently zoned communities in the Boston area, mentioned that its original estates were founded by wealthy families who had fled Boston when the city adopted a high property tax in the late nineteenth century (Alexander von Hoffman 2010). Zoning had not come to Massachusetts (or any place else) yet. Rich folks could avoid the consequences of unexpectedly high property taxes by selling their Boston homes, which would then be broken up into apartments suitable for lower-income people. This would both lower the tax assessment on the building and spread the tax burden among a number of tenants rather than a single owner. Boston might be poorer as a result (assuming the building was prematurely subdivided), but the escaping plutocrat could reduce his losses by relocation.

If Boston had had a zoning law that prevented people from subdividing mansions into apartments (as most modern ordinances do), the rich owner would have needed to find some other rich owner to buy the mansion if he wanted to avoid the higher tax. The buyer would notice the higher property taxes and refuse to buy unless the price was lowered considerably. Faced with this fact, the original owner might decide to stay where he was, just as he might calculate under a pure land tax.

Of course there were many other reasons that people might move to the suburbs besides tax avoidance. City services might be deteriorating, or suburban locations might be easier to reach because of commuter rail service or streetcars, which were proliferating at that time in Boston. But without zoning, higher property taxes were another push to the suburbs. One of zoning's functions can be thought of as trying to reduce property-tax avoidance by making any structure's use difficult to change. It isn't quite a tax on land, but if a land tax is too difficult to administer, zoning to control property owners' behavior could be the next best thing. Incidentally, the wealthy emigrants to Weston made sure that the problems they left in Boston stayed away. As von Hoffman (2010, p. 31) quotes an early Weston planning document, multi-family homes were excluded because they attracted "a class of tenants who add nothing to the revenues of the town, but who, on the contrary, become the cause of increased expense in all departments."

The problem of controlling erosion of the property tax was also evident in Pittsburgh around the time of zoning's beginnings. The Pittsburgh Committee on Taxation (1916) was convened to study local property taxation, but it soon found it necessary to take a wider view. Under its section on zoning (which the city did not have at the time), the committee's report urged (p. 20) that the city take a cue from New York, which had just adopted the first zoning law in the nation:

> If Pittsburgh is to continue to raise practically all its revenues by taxing real estate values, steps must be taken to prevent the needless destruction of those values and to stabilize and promote their increase in every way possible. ... Should we any longer tolerate sky-scrapers of unlimited height which steal their light and air from their neighbors, or permit the building of public garages, factories or apartments in splendid residential neighborhoods?

Pittsburgh could have adopted an income tax instead of a property tax. A high local income tax, however, encourages emigration from the jurisdiction because there is less penalty for leaving, even if zoning prevents changes in the use of property. Suppose a community with uniformly good housing raises an income tax. Variation in incomes typically exceed variation in property values within communities. Wealthy doctors might live in the same neighborhood as not-so-wealthy professors in similarly valued houses. A switch to a local income tax could induce the wealthy doctors to sell their homes to professors without suffering much of a capital loss. The docs head for places with lower income taxes but endure some deadweight loss (maybe not such good schools). The high tax community

loses tax revenue that it might have been able to keep if taxes were on property rather than on income. This may explain why local income taxes are rare. The primary examples are some school districts in Ohio, and as John Spry (2005) and Joshua Hall (2006) demonstrate, districts are sensitive to the migration possibilities of their residents and limit the use of the tax accordingly. Income taxes in Ohio are mainly used in large-area rural districts where migration out of the district is less likely, and rates have excluded nonlabor income so as not to push millionaires out of the school district.

§4. THE ZODROW CHALLENGE

My view of how zoning makes the property tax efficient is controversial among economists. I hasten to point out that it was not my idea. Bruce Hamilton came up with it when we were both graduate students at Princeton. His idea built on that of Charles Tiebout (1956), in whose view local governments could be thought of as business-like suppliers of public services. Potential residents would "vote with their feet" for the service mix (schools, security, parks, infrastructure) that they wanted. Wallace Oates, who was a young professor at Princeton at the time, had put Tiebout's model on the map by showing that homebuyers actually paid attention to differences among communities (Oates 1969). Towns with the better services had homes with higher prices, while higher property taxes reduced what buyers were willing to pay.

The remaining criticism of Tiebout's model was that it did not sort out potential free riders (Buchanan and Goetz 1972). People could build modest homes in good school districts and pay less in property taxes but still get the benefit of the schools. Hamilton (1975) proposed an elegant but ruthless solution to that problem: Localities would use fiscal zoning to make sure that homebuyers would have to pay enough for housing to generate the property taxes that would pay for the schools. What I will show is that zoning as an institution is capable of configuring barriers to entry to avoid free-riding on local public services.

The scholar with whom I have been cordially (really) paired in opposition is George Zodrow (2001). The view of the property tax that Zodrow has espoused has been called the "new view" of the property tax, which was originally developed by Peter Mieszkowski (1972). What is new about the new view is its larger scope. Rather than just being a local tax on real estate, the new view points out that the property tax is so widespread that much of it could be viewed as a national tax on real estate capital. (New-view people agree with everyone else about the land-value component of property taxes, which nowadays accounts for about a third of real estate values.) After all, almost every jurisdiction has property taxes, and real estate accounts for more than half of the capital stock, so a good part of the property tax could be seen as a national tax on capital.

I am not going to work out the implications of the new view. My task here is to respond to a challenge that Zodrow has laid down. He and coauthor Peter Mieszkowski have conceded that the Tiebout-Hamilton view is correct if—big if—zoning is effective enough to be able to charge every potential entrant into every community for the costs of public services that they incur (Mieszkowski and Zodrow 1989). They call such a condition "perfect zoning," and, as the label implies, they doubt that it applies in many places. In a later article, Zodrow (2007, p. 513) laid down the rules for a study that would convince him that perfect zoning was in fact the rule: It would entail "the admittedly onerous task of conducting a detailed property-by-property study to determine the extent to which the zoning requirements impose binding constraints on marginal housing consumption decisions."

§5. THE STANDARD STATE ZONING ENABLING ACT ESTABLISHED FISCAL ZONING

I am not sure that Zodrow was entirely serious about a "property-by-property" study, but there's something that seems almost as compelling called the Standard State Zoning Enabling Act (usually abbreviated the SZEA) of 1924. An enabling act is, in this context, an authorization of powers by the state legislature to localities. Zoning laws had been adopted in several cities without specific authorization from the state. New York City's 1916 ordinance was the first, but many others followed in rapid succession. The purpose of the SZEA was to remove an important question about zoning's legality. Some state courts had held that such local legislation was "ultra vires," meaning "beyond their powers," and the SZEA made it clear that localities did indeed have regulatory powers that applied to land. It also helped to promote legal uniformity so that developers, planners, and attorneys would not have to learn the rules of each state and community from scratch.

The SZEA was drafted by a distinguished panel of engineers, lawyers (especially Edward Bassett and Alfred Bettman), and city planners (including Frederick Law Olmstead, Jr., son of the designer of New York's Central Park) who were assembled for the task by Herbert Hoover, then the U.S. Secretary of Commerce. It was not federal legislation. Creation of municipal governments and delineation of their powers are exclusively the business of state governments. (Federal court cases about zoning do not concern the legitimacy of its existence; most are about its effect on Constitutionally protected rights or Congressional legislation.) The SZEA was a "model" act that any of the (then) forty-eight states could adopt in order to promote zoning.

The SZEA reflected several years of state and local experience with zoning and related land-use controls. At least a dozen states had written their own enabling acts before the SZEA (Stuart Meck 1996). Bassett, Bettman, Olmstead and the rest of Hoover's committee were not brainstorming about a novel concept. Zoning evolved by experimentation with a number of different regulations. Not all rules survived. For instance, early zoning required the elimination of previously existing but now-nonconforming uses. Public uproar in Los Angeles about its actual application resulted in the current rule that such uses are "grandfathered" and not subject to removal (Kathy Kolnick 2008). Planners proposed but the public disposed.

A remarkable aspect of the SZEA is that nearly every state adopted legislation that was either taken verbatim from this model statute or was heavily influenced by it. This in itself would make the SZEA unusual in the history of state government, as most "model enabling acts" are either ignored or substantially modified by states that adopt them. The enduring popularity of the SZEA stems from the broad powers that it grants to local governments coupled with a lack of compulsion for any community to adopt it. Communities whose voters worried that zoning would undermine their rights could ignore it, while those that valued its benefits could embrace zoning and tailor it to their circumstances.

There seems to be no better way to convey the sense of zoning's powers than simply to reprint the first three sections of the act. These sections are about one-fifth of the entire act, the rest being devoted to procedural matters such as how to adopt an ordinance, administer its provisions, and legally defend it.

> Section 1. Grant of Power.—For the purpose of promoting health, safety, morals, or the general welfare of the community, the legislative body of cities and incorporated villages is hereby empowered to regulate and restrict the height, number of stories, and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts, and other open spaces, the density of population, and the location and use of buildings, structures, and land for trade, industry, residence, or other purposes.

> Section 2. Districts.—For any or all of said purposes the local legislative body may divide the municipality into districts of such number, shape, and area as may be deemed best suited to carry out the purposes of this act; and within such districts it may regulate and restrict the erection, construction, reconstruction, alteration, repair, or use of buildings, structures, or land. All such regulations shall be uniform for each class or kind of buildings throughout each district, but the regulations in one district may differ from those in other districts.
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> Section 3. Purposes in View.—Such regulations shall be made in accordance with a comprehensive plan and designed to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. Such regulations shall be made with reasonable consideration, among other things, to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such municipality.

No economist should overlook that Section 1 delegates to the municipality the power to control virtually every aspect of private development. A building's height, configuration on the lot, size of the lot, its contribution to overall population density, and its use for "trade, industry, residence, or other purposes" are, without reservation, all subject to community control. Nor is there any requirement for compensation for regulations that might be especially burdensome to individual property owners, though compensation is not precluded, either.

Section 2 of the SZEA does put some limitations on community discretion. Within zoning districts, regulations have to be uniform. In contrast to zoning in much of Europe, American residential zoning districts generally forbade local retail uses. As Sonia Hirt (2013) argues, American uniformity requirements were a big selling point for early proponents of zoning. Uniformity gave the appearance of equal protection of the laws for property owners and served as a barrier against favoritism and corruption.

American uniformity requirements within each zone are offset by the community's almost unlimited discretion as to the number and configuration of zoning districts. Retail stores may not (without a variance) be allowed in American residential districts, but American communities can sketch in a retail business district near enough to residents to create almost the same proximity effect. The American SZEA's section 2 also authorizes not just control at the time of development but also "reconstruction, alteration, [and] repair" of buildings. Zoning authority does not stop when the initial building is completed.

The powers granted to local governments are directed to particular purposes in Section 3 of the SZEA. The section starts with an apparent procedural limitation, requiring a "comprehensive plan," but all this means in practice is that a zoning map cover the entire community, not just a fraction of it. Comprehensiveness distinguishes zoning from nuisance law and private covenants. Nuisance law applies case by case and offers only retrospective remedies for unneighborly activities. Covenants require consent of each property owner, which would be prohibitively costly to obtain where there were more than a handful. Zoning cuts through the transactions costs of universal agreement by authorizing the local government to regulate each property regardless of the owner's consent.

The "purposes in view" of section 3 list what the SZEA's drafters—reflecting urban experience—had in mind. Fiscal considerations are clearly paramount as indicated by phrases

about “safety from fire, panic, and other dangers ” and “adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.” It is difficult to imagine a more permissive charter for fiscal zoning than the SZEA. Its open-ended invitation to regulate may account for the durability of this model act, which still forms the core of most zoning legislation. When regulations not specifically mentioned in the act were proposed, there was little need to go back to the state legislature to amend or expand the enabling act’s list.

An early bottom-up innovation, which the SZEA embraced, was an appointed zoning board, which could grant or withhold variances and special exceptions. Their role in smoothing the application of uniformity within districts to the historical and geographical realities of urban life has always been contentious. Boards were regarded as “that original and ingenious institution devised to cover a multitude of sins (Ernst Freund 1929, p.144). It should be understood, however, that zoning boards cannot change laws or alter districts. Only the local legislature or, in many towns, the voters at large, can amend or rewrite a zoning ordinance.

In the 1970s, lawyers were concerned that some innovations of the era, such as regulating the timing of growth, allowing the transfer of development rights, and establishing historic districts, would be at legal risk (Fred Bosselman 1973; John Costonis 1974). Litigation did follow their establishment, but few decisions successfully challenged the regulations as straying from the state enabling act. Even if they did, the state legislature was often persuaded to authorize the supposedly “ultra vires” innovation to the satisfaction of the community.

The provisions of the Standard State Zoning Enabling Act are a powerful but only partial response to Zodrow’s challenge about the effectiveness of zoning. It shows, I believe, that local government’s in the United States have available to them all of the tools to undertake fiscal zoning. Some economists might object that the SZEA offers only quantity controls, not a true pricing scheme. Economists generally regard price incentives, as by taxes and subsidies, as superior to quantity controls, but quantity controls can get the same results. There are some price mechanisms available under zoning, such as the impact fees and subdivision exactions that will be discussed presently, but the primary mechanism is the establishment of broad and detailed controls over the physical configuration of development.

There is no doubt that fiscal zoning is possible, but the next question is, do communities actually do it? It could be that the tools are left on the shelf or used ineptly. The following sections will address these issues.

§6. ZONING NEED NOT BE STRICTLY OBSERVED TO BE EFFECTIVE

Almost all members of zoning boards (I served on one in the 1990s) can give examples from their neighborhood of activities that violate zoning rules: Woodsheds within the setbacks, driveways wider than allowed, homes occupied by more than three unrelated people. (This last rule is controversial in that it was often applied in communities with attractive school systems in order to limit enrollments, but college towns use it to keep student housing out of residential areas.) Some of these exceptions reflect the grandfathering of previously existing nonconforming uses, but even these could be thought of as undermining the strict application of fiscal zoning principles. Indeed, one can find numerous exceptions to strict adherence to private property rights. This article opened with a bow to Robert Ellickson’s field work about cattle-trespass in Shasta County, California. He found that the formal rules of trespass law were largely supplanted by local norms. If a group of scholars investigating private property started in Shasta County, they might easily conclude that it was not much of a constraint. The same could be said of zoning rules.

But the exceptions to both property law and zoning law are, well, exceptions. They are important in that exceptions are useful to prove the rules. ("Prove the rule" originally meant explore or probe the rule, not provide a logical proof.) Ellickson's initial inquiries were a springboard to developing a more general theory of social control, one in which legal property rules were relevant chiefly in high-stakes controversies and among distant strangers. This is likewise true of zoning exceptions. Minor zoning violations are often tolerated among close neighbors. (Most enforcement is the result of citizen information, not active policing.) In many states, a long-standing, harmless zoning violation can eventually receive legal blessing (and thus not complicate real estate sales) even if it had not been given an official variance. Many zoning boards seem to operate on the pick-up basketball rule of no harm, no foul. If the neighbors don't object to the proposed variance (or better, if they support it), it is often granted by the zoning board despite the niceties of the ordinance.

All of these are what I would call "intimate exceptions" to property law and zoning law. Instead of invoking the law, neighbors tailor their relations around norms of reciprocity. This helps to keep administrative costs (e.g., consulting with lawyers) low, which may be why most of the complaints about them in the literature are by attorneys. No harm, no foul, no billable hours.

The intimate exceptions could add up to a large fraction of the rules, but they do not add up to a large fraction of the developable space, nor do they add up to a judgment that fiscal zoning is ineffective. In Ellickson's Shasta County, local norms did not apply when the stakes were high and when strangers were involved. Large scale invasions by an opportunistic (and out-of-state) rancher were met with calls for legal remedies, and when a cow was hit by a motor vehicle with catastrophic results, lawyers were not disdained. Use of a home in a residential district as a commercial auto-body shop will bring the zoning administrator to the door, and a court injunction and day-by-day fines will follow if the shop is not soon shut down. I have been on a board that required a homebuilder who knowingly violated the setback rules to dig up the foundation that he had already poured, and he did so. An unintentional violation of a skyscraper height limit in New York City resulted in the owner having to remove twelve nearly-complete stories (Simon Elkharrat 2012). (The city could have granted a waiver, but a Manhattan neighborhood group, Civitas, headed by former city parks commissioner August Heckscher, insisted that the letter of the law prevail. New York Times, March 29, 1989.) A noncompliant owner faces many penalties, and failure to comply with legal judgments will affect the salability of his or her land.

§7. IS IT WORTH ZONING IN GREAT DETAIL?

Disbelievers in fiscal zoning could concede that all of the above is true but still contend that none of this actually affects the "marginal housing consumption" that George Zodrow is concerned about. Margins are small units, and controlling all of them would be problematic. When I wrote a comment on the relationship of zoning to property taxation (in response to Mieszkowski and Zodrow 1989), I opened with a story that illustrated the margins problem:

> A few years ago I was driving through the rural town of Orford, New Hampshire, about twenty miles from my home in Hanover. Orford has unusually high property taxes because it proudly chooses to have its own high school, whose graduating classes number a few dozen, rather than send its children to less costly regional high schools. On this trip, I noticed an unusual herd of cattle along a rural road. The steers had a long, shaggy coat. The farmer was nearby, so I stopped to ask about the unusual breed. He explained that they were Scottish

> Highland cattle, which do not have to be kept in a barn in the winter. He did not want to build a barn, he volunteered, because then his property taxes would go up.
>
> There you have it: The deadweight loss of the property tax is hairy cattle. (Fischel 1992)

Actually, one might reasonably ask what kind of deadweight loss there is in hairy cattle. A few years later I got to know Bill Baker, the farmer who owned the cattle, and he took me on a tour of his farm (still without a cow barn) and explained the economics of Highland Cattle. He raised them primarily for breeding stock, which were usually sold to survivalist homesteaders in Alaska and other remote areas. Cattle that did not meet his breeding standards were "put in the beef program," as he delicately phrased it. He gave me a sample of meat to take home, and we had it for dinner. It was tough and had an after-taste of liver. The deadweight loss of hairy cattle (and perhaps a cost of being a survivalist) is not very tasty beef.

The town of Orford did not then have zoning, a distinction enjoyed by eighteen other rural towns in the state. (New Hampshire has 234 towns and cities.) But even with zoning, Bill Baker would still have had pretty much the same incentives to avoid property taxes and could have done so under all but the most draconian zoning scheme. The Town of Draco's ordinance might read something like, "for every animal unit there shall be four square meters of barn built to the standards set out in section 104.B, subsection 38A." It would not be beyond the powers of zoning to make such a rule, but it would be unlikely that a rural community, where landowners and farmers are important political actors, would actually do so.

The same problem of micro-management of construction arises even in many thoroughly zoned cities and towns. As Zodrow points out (quoting Helen Ladd 1998), ''no one would disagree that the property tax would distort decisions about minor expansions and repair that are beyond the purview of the zoning authority but not the tax assessor." Actually, those are my words; because of the opaque editing of the volume, writings of the commentators (of which I was one) were mixed with those of the principal author. So I have long conceded that for small-scale decisions, the property tax could have some deadweight loss. It is possible that assessors do not notice these small changes, either. Reassessment occurs only every few years, and the hedonic regressions that are used in mass appraisals have fairly crude indicators of building quality. But the point remains: Within the zoning envelope (the maximum height, setback, and floor-area permitted in the district), there are discretionary decisions about maintenance and expansion that might be discouraged by the property tax.

My main point about minor construction decisions, however, is that we should consider the administrative costs of making institutions do their job when evaluating zoning and property taxation. The institution of private property is not seriously impugned by the fact that there are everyday exceptions that are too costly to police. Employees routinely use company photocopy services for private use; children often take shortcuts across private lawns on their way to school; department stores that combat "shrinkage" of their inventory too vigorously might excessively shrink their customer base and their pool of employees. Zoning laws could make every property decision subject to public review, but in most cases it seems hardly worth the candle. (I learned from a student paper that some German cities actually do zone every structure for its current characteristics, so that every change is subject to public review, and this seems also to be the case for exterior modifications of buildings in American historic districts.)

§8. WHICH MARGIN? HOLISTIC DEVELOPMENT PROJECTS

The margin at which zoning's fiscal control is most important to communities is new construction and redevelopment. At these decision points, the local government almost always has some say in the formation of its tax base. Developers who propose projects that have large public service costs without offsetting tax benefits are well-advised to make some additional arrangements to satisfy public authorities.

These conciliatory arrangements can be difficult for scholarly observers to detect. The developer of a housing project might offer a public park as compensation for the additional congestion. If it is large enough, she might include some commercial development to add to the tax base. She might accede to financial exactions and pay impact fees as part of the deal.

Such side payments are fairly routine and usually uncontroversial, but after they are put in place, they become fiscally invisible. That is, five years or so after the project was built, the property tax payments from each house do not seem to pay for the services that can be fairly attributed to each household. But that calculation overlooks the previous payments—the in-kind compensation of the park, the payments from the new commercial development that was tied to the rezoning, and the exactions for new sewerage and roads—that were part of the decision-making process by the community authorities.

To make serious judgments about fiscal zoning, scholars need to evaluate zoning in a more holistic context. That context includes more than the aforementioned side payments. It also includes the situation of individual communities. For example, it may be that an important local public good is not yet subject to congestion by newcomers. Some years ago I was driving through Wyoming and listening to a radio program featuring two candidates for mayor of a nearby town. Both candidates were outdoing themselves in promising to attract more residents. The reason was that they wanted to build up the tax base so they could pave the town's dirt streets. More recently, many small towns in America's Great Plains are eager to attract new residents in order to have more children in local schools, which would otherwise be shut down and replaced by a distant regional school (Timothy Egan, New York Times, Dec. 1, 2003).

More commonly, fiscal issues are made invisible by attention to employment concerns. In larger metropolitan areas, fiscal concerns usually take precedence over employment issues because the employers can locate in a number of different towns. It usually makes little sense for a small suburb to make much effort to attract firms to boost local employment, since most of the beneficiaries of their efforts will be workers who live elsewhere. An automobile assembly plant would provide jobs to the larger area but concentrate the disamenity in its host community. In suburbs that are a small part of a larger metro area, it is the fiscal benefits that must be relied upon to compensate the host community.

But a small, declining city that is distant from other employment centers might find that the jobs such developments offer might be worth some sacrifice on other fronts. The city council might decide that it is worth the extra downtown congestion they will have to deal with. If the new developments are fairly benign in this respect, the city might be willing (surely with a prod from the developer) to give up something on the fiscal side and grant property tax abatements. The city might provide new local infrastructure for the employer that is financed by general taxes rather than exactions. This is a situation in which it appears that the city is giving away fiscal benefits, seemingly the opposite of fiscal zoning, but the city may well be calculating that on net it will improve its fiscal health. After all, if the city cannot attract employers, it is likely to face a net loss of residents and a deteriorating residential property tax base.

An important institutionalized approach to promoting industrial redevelopment is tax increment financing, known by its pugnacious acronym, TIF. Communities that want to promote development can designate an area in which additional property-tax revenues (the "tax increment") from the new

development can be used to finance the development and its infrastructure. The city continues to collect property taxes at the old, pre-redevelopment level until the project is paid off, after which normal property taxation resumes. The idea is that the community won't lose too much money in the short run but will gain a redeveloped area, with its better infrastructure, jobs, and tax revenues, in the long run.

The economic efficacy of TIFs is debated in an extensive evaluative literature (e.g. Weber et al 2007), but my main point here is that TIFs are also a calculated land-use decision. The community uses its regulatory powers as well as its (abated) fiscal powers to attract industry. All of this suggests that the commercial and industrial side of the property tax base, which account for almost half of all revenue, is largely open to negotiation between the city council and footloose firms.

Nearly every state has some program that allows localities to negotiate whether to grant property tax relief. The best evidence for this comes from sources that decry the excessive use of tax incentives, mostly because city councils have difficulty distinguishing between businesses that are truly footloose and those that are thoroughly anchored but feigning flightiness (Kenyon, Langley, and Paquin 2012). Public economists are surprisingly opposed to competition among communities in this realm, but that may be due to the incentive for political opponents to dwell on bad results. Many location mistakes are made in the private sector, too, but they are more easily concealed in corporate annual reports.

It should also be emphasized that detailed regulation of commercial and industrial property is relatively uncontroversial. Regulation of housing development can bring complaints from housing advocates, state legislatures, and the courts, but exquisitely detailed regulation of nonresidential property seldom raises such issues. This allows, as I argued long ago in my PhD dissertation (summarized in Fischel 1975), the substitution of regulation for taxation. A firm that would not pay enough in property taxes to compensate the community can be made to pay in-kind or monetary exactions to top-up the ante. This happens also in residential development, but the practice is subject to more criticism as exclusionary zoning, a problem nonresidential development seldom faces.

Concern about local employment and its flip-side, the adverse neighborhood effects of business and industry, means that local concern about property tax revenue is nested in a larger set of local objectives. It is similar to a retail store's concern about preserving its inventory of goods, which is nested in its larger concern about profits. Store managers will sacrifice some of their stock if additional protective measures will alienate too many customers and employees. City managers, whom I argue are at least as faithful to their constituents as the managers of business corporations, rationally trade off one margin against another, and that can make property-tax issues appear to be less than central.

§9. COMMUNITY HETEROGENEITY AND THE TIEBOUT MODEL

My defense of fiscal zoning has so far focused on its ability to mold the process of development and redevelopment. To the extent that the community can do that, it has the capacity to make the property tax on capital have nearly the same properties as a tax on land. The land tax's virtue is that owners cannot shirk from taxpaying by removing land from the jurisdiction. Zoning makes the building (capital) component of the property tax difficult to shirk as well.

There is another aspect to fiscal zoning that the Tiebout-Hamilton model entails and which is even more controversial. The Tiebout model proposes that residents can shop around among communities to get their most-desired mix of public services. This shopping trip results in property tax payments that are essentially a fee for services. Of course, all taxes could be thought of as a fee for government services. What makes the Tiebout-Hamilton model different is that the local government services obtained by every resident have the same quality as private goods. The economic sacrifice a family makes to purchase the package of local streets, schools, parks, and sewer systems is valued at the same rate as its sacrifice for other goods such as a piano. (For economists, this means that the ratio of the marginal

utility of the piano to its price is the same as that ratio for all other goods, also known as the Samuelson efficiency conditions.) In the standard economic discussion of public goods, meeting this condition is impossible for public services because new consumers cannot be excluded from them in the way that they can be conditionally excluded (if they do not pay) from ordinary goods.

The previous sections have argued that zoning provides the exclusion mechanism to make the Tiebout model work. But economists have a further objection to the application of the zoning process. If it works so well, why do we see communities that are so diverse where we (economists) would expect their residents to be very similar in character? (Calabrese, Epple, and Romano 2012). Diversity is a problem for economic models for two reasons. One is that the demand for public goods is assumed to be strictly income elastic. Rich people are willing to spend more on good schools and clean streets than poorer people, an unattractive but not unreasonable generalization. The other problem is that even if demand were not sensitive to income, the "tax-price" that people with different incomes would pay is different. People who live in smaller houses with low assessments end up paying less in taxes, but they get the same amount in public services. This causes them to vote for more services than they would pay for in the private market. For the opposite reasons, rich people are "overcharged" for local services and thus get "too little" for their money. Both heterogeneity and different tax-prices seem to violate the efficiency conditions that the Tiebout-Hamilton model proposes.

Heterogeneity of income raises a complicated question of perspective. In the view of many reformers, suburban communities are way too homogenous. The "white bread" suburb prevents the poor and minorities who live in central cities from accessing the suburbs and obtaining the better educations and safer neighborhoods that they provide. Economists such as Anthony Downs (1994) specifically blame zoning and allied practices for this outcome. It is not, as some other urban economists have argued, the natural process of housing development. In one sense, then, the suburban reformers are allies to the economists' argument that zoning works effectively. The twist is that the reformers regard the outcome as quite undesirable.

On the other side of the coin are economists who point out that most communities, even the suburbs, are a lot more heterogeneous than their conception of the Tiebout-Hamilton model would lead one to expect (Pack and Pack 1977). There are plenty of poor people in the suburbs, and rich people do not all congregate in the same municipalities. One can find a few examples that border on perfect homogeneity of housing (mostly because their land area is so small as to constitute only a single neighborhood), but the bulk of the suburban population live in communities where they can easily rub shoulders with fellow residents who have twice or half their income.

One way to reconcile these different views of residential sorting is to invoke a widely-shared degree of myopia on the part of land-use planners. They do not foresee that general income growth will make people demand larger homes and better public services to complement them. Thus they undertake rational fiscal zoning based on current economic conditions, which allow for smaller homes and lower impact fees than would be justified under a long-range view that sees today's mansions become tomorrow's middling homes. Because this myopic view is periodically updated for new developments, which then are more costly than the old ones, the community comes by stages to be more heterogeneous even though that was never the goal of any particular generation of planners and the public that supported them.

Even if zoning becomes more restrictive, older substandard uses are grandfathered. In short, the history of community development makes a difference. But because zoning makes each housing type inelastic in supply, housing prices adjust to eliminate the fiscal transfer for new buyers of homes (Bruce Hamilton 1976). Buyers of small units find that they have to pay for the privilege of being subsidized by owners of larger units. It is possible (though unproven) that households might sort themselves among

communities efficiently despite the heterogeneous housing stock, with smaller units being occupied by those who are willing to settle for less housing in exchange for better schools and other local services.

§10. DEMAND FOR (LIMITED) COMMUNITY DIVERSITY

I certainly agree that history matters for community development, but that complicates the benefit view of property taxes that I espouse. So I advance here an additional public good that helps along the benefit view, the demand for "(limited) community diversity." There are two aspects to the phrase in quotes. Community diversity is desired by many homebuyers. I impute this demand to homebuyers from their apparent demand for it in their children's colleges and universities (Caroline Hoxby 2000). Highly selective institutions could easily fill their ranks with full-tuition-paying students whose academic credentials are excellent. They instead reserve some fraction of their scarce spaces for lower income and minority students and finance the scholarships in large part with higher tuition payments on the well-to-do families.

I once shared the view that this practice was the product of top-down social engineering. Colleges engaged in affirmative action for students and employees to satisfy or at least preempt their federal masters. But that pressure, if it was ever much of a threat, has long since abated, and colleges still want to create diversity. American colleges compete vigorously for students and faculty, so they have to make themselves attractive to them. Almost all of the selective colleges list diversity as a goal, and most seem willing to trade-off other objectives to achieve it. The reason is that prospective students demand diversity. Diversity is a public good because it depends on the fraction of the population in a geographic area (college or municipality) and cannot easily be obtained by purely private actions on the part of students or households.

The more direct evidence in support of a public demand for (limited) diversity is the experience of Massachusetts. In 1969 the legislature passed what was commonly called the "anti-snob zoning" law. The law requires that communities that have less than ten percent of their housing stock designated as "affordable" (by regional income standards) are subject to state-imposed modification of their zoning to allow qualifying moderate-income housing. The law has long been controversial, especially in the suburbs, and it is not toothless, as Lynn Fisher (2007) has demonstrated.

A statewide initiative was presented to the voters in 2010 whose purpose was to abolish the anti-snob-zoning law, which has come to be known by the less-judgmental statutory designation, "40B." Since a majority of Massachusetts voters live in cities that are subject to 40B oversight, I expected that the initiative would pass handily. Instead it failed by a convincing margin, with 58 percent of the vote opposing repeal of 40B. Only one county (Plymouth) favored repeal, so it was not obviously a suburb-city division. Despite the neighborhood and often community opposition to individual 40B projects, it appears that voters are reasonably satisfied with the (limited) obligations that it imposes on their communities.

The other aspect of "(limited) community diversity" is the (limited) side. I put it in persistent parentheses because it is generally not spoken or explicitly written. Sometimes it is alluded to in calls for regional "fair share" schemes to distribute low-income housing among communities, but it is mostly kept quiet because it evokes terms like quotas, tokenism, and gentlemen's agreements. The anxiety that gives rise to the demand for limits on diversity is what Thomas Schelling (1971) called the tipping point. Modest degrees of diversity (which would still usually exclude or severely limit public housing and mobile homes) add to the value people place on their community, a value usually reflected in the price of homes. But if diversity diverges much from the regional average, it becomes a liability rather than an asset. If the fraction of low-income housing increases from, say, ten percent to twenty percent, middle-class homeowners worry that prospective buyers of their largest asset will project that increase into the

future and shy away from the community. Homeowners and home buyers are forward looking, and the most usable projection is what has happened in the recent past. Some existing owners may panic and sell at low prices to escape even lower prices in the future, and the community has tipped into a downward slide in value.

Zoning allows communities to provide (limited) diversity within the community. It offers the extra insurance that diversity will not exceed the unspoken tipping point that would repel many homebuyers. To the extent that it is successful, diversity zoning can explain why communities can engage in fiscal zoning while at the same time appear to defy its principles by allowing or even encouraging some housing to be built whose additional tax revenues will not cover the additional cost of local public services.

§11. THE SPECIAL POSITION OF SCHOOL DISTRICTS

School districts look like a problem for fiscal zoning. Taxes earmarked for local schools account for about two-thirds of all property taxes paid. Property taxes account for almost all of school district revenues aside from the (often larger) revenue obtained from state grants and transfers, and locally generated taxes are usually the only source of discretionary funds. Almost all school districts are governed by boards that are elected separately from general municipal government, and school boards have no authority to appoint local land use boards. School district boundaries frequently wander outside of municipal and county boundaries, and consolidated districts often encompass more than one municipality. Even if municipal zoning were dedicated to preserving the fiscal status quo by restricting construction that would bring more students, its regulatory geography would in many cases fail to reach a project that would send their taxpayers larger school-tax bills. By the same token, the regulators who do have control over the areas in question could easily turn a blind eye to the fiscal consequences of a child-rich but low value development, since costs would mostly fall on voters in another jurisdiction. In short, school districts look like the exception that consumes the fiscal zoning rule.

In our survey of the overlap between school districts and municipal and county boundaries, Sarah Battersby and I (reported in Fischel 2009b, chap. 5) found that the divergence between boundaries was more apparent than real. In New England and New Jersey, district and municipal boundaries almost always correspond. Consolidated districts there are combinations of municipal boundaries, and financing the schools is usually done on a proportional use basis—more students, more taxes—so that in a fiscal sense each municipal tub rests on its own bottom. The New England model (as I shall call it) prevails in much of the rest of the urban Northeast. In the South, the pattern tends to be countywide school districts (as in Florida, Maryland, and Louisiana) or large urban districts surrounded by suburban county districts (as in Atlanta and Nashville). But in these same places, the county also regulates most of the developable land, so that zoning jurisdictions and school districts overlap closely. The pattern in the West is more mixed, but even in these areas we found that most of the urbanized population lived in a district that had substantial overlap with municipal boundaries. When suburban development spreads into the unincorporated county firmament in the West, the preexisting school district lines form obvious boundaries along which to form municipalities.

That the school board is elected separately from the city council makes no difference for land use policy in the political model of local governance that I espouse, which is that both elected bodies represent the interests of a majority of resident voters. Indeed, service on the school board is often a precursor to service on a city council or other municipal office. In the many instances in which land-use ordinances and their amendments are put to the voters, the correspondence is obvious. Studies have shown that popularly elected municipal officials adopt policies that are quite similar to those adopted in otherwise similar jurisdictions by the voters themselves (Salvino, Tasto, and Turnbull 2012).

Even if one does not accept the majority-rule voter model, most of its alternatives also point to some correspondence of interests across governing bodies. If it is bureaucrats who dominate politics, both school superintendents and municipal managers will be interested in preserving their tax base in order to increase their power and perks. If it is special interest groups such as employee unions, preservation of revenue sources is something both school boards and city councils will be interested in. That one can invent perverse scenarios or recount anecdotes in which there is a failure to coordinate is not sufficiently persuasive to overcome the fact that pretty much the same people who elect school boards also elect city councils.

§12. SCHOOL CHILDREN AS A FISCAL MENACE

Another argument against fiscal zoning is the simple observation that local officials allow structures likely to house children who could attend the local schools. By most calculations, a family with children is a fiscal drain on the community. A recent article calculated that the main subsidy to local education was not from high-income to low-income households, but from the tax payments by households who had no children currently in the school system, who account on average for about two-thirds of all households (Kurban, Gallagher, and Persky 2012). (Their result should, by the way, chasten the usual back-of-the-envelope calculation of fiscal impacts of new housing, which usually attributes one or two kids per household, when the number per unit at any given time is now about one-third the assumed number over the life of the taxable unit.)

My main reason for pointing to the Kurban et al result is that it appears to show that a two-thirds majority of the voters must be fiscally irrational. They have no children but still fail to vote down all school budgets (beyond that mandated by state law), and they still allow zoning that permits at least some residential development. A community that zones for any homes at all is *prima facia* evidence that fiscal zoning cannot be an operative motive, since new houses bring in children and less tax base than is needed to pay for their education. Indeed, the fact that any sentient adult consents to conceive and raise children is surely evidence against basic economic rationality. Even if we neglect the outlay on direct expenditures for food, clothing, entertainment, and education of the young, the time cost of raising children is immense. Think of those hours wasted attending teacher conferences, going to soccer games, watching school plays....

Of course I am kidding. One of the main reasons for having children in an urban society, say sociologists who are not afraid of outrageous questions, is that children connect us to the rest of the world (not to mention other generations) better than most other ways (Robert Schoen et al. 1997). I took the connections argument one step further to ask why voters seem reluctant to abandon local public schools in favor of a privatized system involving education vouchers (Fischel 2009b, chap. 6). Formal education, after all, is not a public good in the classic sense of nonexclusion or nonrivalness, as the robust system of private schools that are attended by about ten percent of children clearly demonstrates. The publicness of local public schools, I argued, is that it augments the location-specific social capital of parents and so reduces the cost of citizen-provided, local public goods. Public schools are the main way that adults in modern urban societies get to know other adults outside of their workplace. (I used to get what I called the bobble-head effect when I first presented this at seminars, in which young adults of child-rearing age began to nod vigorously. I actually obtained more empirical evidence for the hypothesis than that, though none more memorable.)

So the view of children as a fiscal sump to be avoided requires a model of human behavior that is way too selfish. Even the classical, bare-bones economic theory of consumer behavior posits an atomistic household in which the utility of one member is the utility of all. I am aware of scholarship that splits that atom into smaller parts and explores variations in its members' interests, but that does not alter the

persistence of family life. And even as children among native-born Americans (and indeed in most high-income societies) have become more scarce, support for education, at least as measured by spending per pupil, continues to grow. For a community to regard school children mainly as fiscal losers is like saying one should avoid good music, international travel, or fine food because you might acquire an expensive taste.

There's also a more selfish reason for communities to welcome families with school children. Study after study finds that the quality of schools is one of the most important determinants of home values in suburban areas (Haurin and Brasington 1996). Communities cannot have good schools unless they allow families with children. This elementary proposition is often hidden in studies that look only at the cost effects of new development. The benefits of an attractive community held together by the ties that bind the parents of schoolmates are entirely overlooked. But in fact the benefits of local school spending are usually larger than the costs, if their net effect on housing prices is any judge (Kang, Skidmore, and Reese 2013). These benefits may account for the "overcapitalization" of education that researchers have noticed. Public schools seem to add more to the value of communities than seems justified by purely economic calculations, which usually involve comparing the cost of private education.

Of course, there are diminishing returns to this as well as other good things. It would be imprudent for any community to suppose that the benefits of having school-age children can be had without a cost. Even the most child-friendly community might balk at a large project that would suddenly flood the school district and cause overcrowding before more facilities could be built. Oversize districts and crowded schools are potential detriments to school quality and to the fiscal health of the community. Community authorities might reasonably use their land-use levers to demand that larger-scale developments contribute something extra, beyond anticipated property tax revenues, to build schools. That does not alter the fact that most communities continue to behave as if schools and the children who attend them are a community asset as well as a fiscal liability. As I have emphasized in this essay, fiscal zoning is a nested part of a more general hypothesis about municipal objectives and means of achieving them.

§13. THE RURAL AND BIG CITY EXCEPTIONS AND DELAYED CAPITALIZATION

The model of political economy that I have espoused in the *Homevoter Hypothesis* (Fischel 2001) holds that homeowners are the dominant faction in local government politics. Owner-occupied homes provide both consumer services (housing) and an undiversified, durable investment (house and land) that is sensitive to the things that local governments do. As a result, homeowners monitor local government activities and discipline local officials whose actions jeopardize home values. This makes them especially leery of land-use proposals that would have adverse fiscal consequences for the community.

Homevoters are most numerous in the suburbs. Indeed, the modern independent suburb was invented primarily to serve homeowner interests (Robert Fogelson 2005). A majority of the population of the United States lives in suburbs, but a good fraction still live in central cities and rural areas. Homeowners are less influential in both places but for different reasons. Large city government officials are attentive to homeowners, but they also pay attention to development and employer interests as well as those of residents. Cities also have a larger proportion of residents who rent rather than own. They have the full panoply of land-use regulations, but their exercise often serves goals other than simply protecting the value of single family homes. Employment issues and renter protections are given more emphasis than they would in most suburbs. While developer interests are hardly paramount, their role is more prominent in bigger cities because they can help fund political campaigns for city offices. Suburban politics is simpler and more transparent.

It would be wrong, though, to dismiss central cities from the fiscal zoning model. I argued earlier in this essay that fiscal zoning has to be evaluated as a unit in a nest of objectives of the local polity. In central cities, fiscal zoning is deeper inside the nest than in the suburbs, but it is still there. Few central city mayors will be unconcerned about erosion of the tax base from a project even when it might also provide employment benefits and reward important donors. And neighborhood groups are also quite powerful within most cities, and they are likely to become more important in those cities that have become "consumer cities" in the phrase of Edward Glaeser, Jed Kolko and Albert Saiz (2001).

Rural areas are different from suburbs and cities because of their larger stock of undeveloped land. This has two influences. One is that owners of undeveloped land—often farmers or ranchers—have a bigger say in local affairs, especially about land use regulation. They are more skeptical of the virtues of zoning, since it may interfere with their plans to develop their multi-acre parcels at some time. But it does not eliminate for them the concerns that animate zoning in more suburban locales. Nearby development by other property owners may have adverse effects on their own plans. Projects that would adversely affect the local fiscal condition would also be unwelcome. Most rural townships (in the East) and counties (in the South and West) now have zoning, and so they possess the devices that enable the local government to manage the future property tax base. Fiscal zoning may be less of a priority in rural areas, but it is not absent altogether.

The other influence of a large stock of undeveloped land is that the benefits and costs of local decisions are less likely to be capitalized in the price of existing houses. If some exogenous event causes suburban property taxes to be reduced or local services to get better (say, via an unexpected court decision), the town becomes more attractive and more people want to live there (Byron Lutz 2009). Because most suburbs are built out and local zoning prevents much infill development, such happy events cause existing home values to rise. But in rural areas, where there is plenty of land available, the more favorable fiscal circumstances (lower taxes) will cause more homes to be built, thus damping the demand for existing homes and allowing for only modest increases in the price of existing housing. The Lutz result seems to suggest that fiscal zoning is ineffective in rural areas. But that is because our eyes are trained on the owners of developed land, typically homeowners.

What *is* capitalized in rural areas from an unexpected shift in demand for housing is the price of *undeveloped* land, and fiscal zoning is part of this story. To see this, consider a rural community in which some of the lots have houses (containing resident voters) but most other lots are undeveloped. Furthermore, suppose that the undeveloped land is owned by a majority of community residents. (They are mostly farmers who expect eventually to sell their land for development.) They have an interest in establishing zoning that will maximize the value of their property, which includes the homes in which they live and their undeveloped land.

In order to attract homebuyers, the enterprising farmers will zone the land in such a way that is consistent with fiscal probity, separating incompatable uses and excluding fiscal losers. The development takes place, and the value of their original homes does not rise, since the new homes that are being built are pretty much perfect substitutes for the pre-existing homes. But of course there is an enormous capital gain to be had here in that formerly undeveloped land (the farmland) has become more valuable. The capitalization effect of effective fiscal zoning is reflected in the value of newly developed land rather than existing homes. (The rural-to-urban transition as described here reflects the experience of Dairy Valley, California, now the Los Angeles suburb of Cerritos, where farmers initially attempted to exclude residential development by large-lot zoning but then decided to rezone for suburban residential use and relocate their farms elsewhere, crying all the way to the bank [Carol van Kampen 1977].)

To see this effect more clearly, consider a community that has been entirely developed by a single owner. The Walt Disney company bought land in Florida and developed the town of Celebration, which was developed incrementally over a period of years (Frantz and Collins 1999). The town was entirely master planned so that early homebuyers would know what to expect in later stages of development. A shift in demand for homes (for example, by lower interest rates) in Celebration would, during the early years, not affect the prices of existing homes (owned by residents) because the Disney Corporation would speed up development of new homes. After Celebration was entirely built out, increases in demand for homes there would increase the prices of all homes. Adherence to the master plan (the private zoning) preserved the value of homes in all stages, but only after the community was complete would an unexpected shift in demand be reflected in existing home prices. The value-preserving benefits of effective fiscal zoning (or the Disney master plan) were operative at every stage of development, but they were only easily detectable after the supply of new homes was exhausted.

It should be noted, however, that the development of privately planned communities is controlled by a single developer who typically holds a large majority of votes in the evolving homeowner association (Uriel Reichman 1976). This allows the developer to prevent early residents from altering initial plans and thus preserves his or her ability to profit from continuing development. Public zoning cannot be similarly constrained, and it results in suboptimal development (Vernon Henderson 1980). This difficulty does not affect the fiscal zoning motive, however.

Fiscal zoning will not appear to be binding in rural communities, then, but that does not mean it is absent or irrelevant. Buyers of homes in rural areas care about local services and taxes as much as any other set of homeowners. A poorly zoned community would deter them from settling there, though they might possibly reason that they can correct an overly permissive ordinance once they take the reins of local government. Zoning is seldom radically changed to the benefit newcomers until they greatly outnumber established residents, and even then some apparent crisis may be necessary for newcomers to take the helm (Thomas Rudel 1989). Thus original rural zoning does matter to new residents.

The subtlety of capitalization is relevant to another zoning issue. A number of national and regional studies have indicated that excess growth of housing prices has been caused by increased zoning restrictions (Glaeser, Gyourko, Saks 2005). But housing prices have not gone up in other areas of the country (chiefly the South and the Midwest). This has led some economists to conclude that zoning is only effective in a few parts of the nation, such as California and the Northeast. But this overlooks that the higher prices in the latter areas are driven by differential demands to locate there. Zoning can drive up housing prices only as long as there is excess demand for existing units, and then only when the supply of new sites is severely limited.

But limiting the total amount of development is hardly the only zoning objective. Growth controls were a 1970s development. Even before the growth-control movement started driving up housing prices, fiscal zoning was clearly operative in that it was able to preserve public services from congestion by overdevelopment. This is one of the implications of Wallace Oates's 1969 study of his New Jersey sample, which as taken from the 1960 Census, in the pre-growth control era. Without zoning to control fiscal free riders, it is unlikely that any community could have capitalized the benefits of better-than-average schools or lower-than-average property taxes. It will not do to argue, as do Hilber and Mayer (2009), that such communities were fully developed, since something has to be in place to prevent subdivision of existing homes by developers to take advantage of the net fiscal advantage in high-service or low-tax communities. That something is zoning.

§14. CONCLUSION: IS THE LOCAL PROPERTY TAX REALLY A TAX?

Taxes are involuntary payments to the government for which no specific benefit is promised, other than staying out of jail. The definition begs many fine distinctions, of course. Social security "contributions" (the "FICA" deduction in your pay stub stands for Federal Insurance *Contributions* Act) entitle one to social security benefits at some time in the future, but outside of the offices Health and Human Services in Washington, they are regarded as taxes. You don't have the option not to pay them, and the benefits are only loosely related to the amount paid.

Property owners similarly have no choice about paying their taxes (though assessments can be appealed), and the money they pay to the local government is used to provide services for which the taxpayer gets no earmarked benefit. But this view overlooks activity prior to the payment of the taxes. You don't have much choice about making your monthly mortgage payment (although the penalty for failure to do so is less onerous than that for failing to pay taxes), even if your house is no longer satisfactory, but few would regard mortgages as a tax. You volunteered for this homeowning commitment, and you could have kept renting.

In the United States, most people choose their municipality and school district in the same sense that they choose to purchase property and assume mortgages to finance it. Indeed, for most people the choice of buying a house is closely bundled with the community in which the property is located. But this would be true even if local services were financed by a local income tax. What the present essay has argued is that the community itself—its elected and appointed officials, more or less responding to established residents—actively shapes and manages the property tax system in a way that would be difficult to do with any other tax base. Local land-use regulation constrains the wholesale tax avoidance behavior that bedevils most other tax bases. Supplemented by revenues from impact fees and by negotiated exactions from developers, fiscal zoning makes most development pay its own way. Apparent exceptions to this behavior arise chiefly because communities trade off fiscal security for other objectives such as employment or (limited) income redistribution.

In my 1991 paper in which I first defended this position, I added to it my then-recent hypothesis (Fischel 1989) about the cause of California's Proposition 13, which severely limited the property tax and the growth of assessments. Prop 13 looks like evidence in support of a general aversion to property taxes, but I took it as an example in support of my view that local property taxes are more like fees for local services. Prop 13 was caused, I argued, by the California Supreme Court's decision in Serrano v. Priest, 135 Cal. Rptr. 345 (l976), which required that school spending could not vary among districts on the basis of variation in local tax bases. The legislature's implementation of this plan in 1977 meant that most local property tax payments were no longer related to local schooling, which made the property tax into a statewide tax.

The voters rationally responded, I have argued in many articles (best summarized in Fischel 2004), to this exogenous event and latched on to the first initiative that severely limited the property tax. If the schools have to be state funded, the voters seemed to be saying, let the state use something other than the property tax. If I am right about this, the connection between the *Serrano* decision and Prop 13 is evidence in support of the fiscal zoning model. Voters had formerly regarded their property taxes as a fee for (mostly) school services, and they had used fiscal zoning to protect their property-tax base. When the state, per the *Serrano* decision, commandeered local property taxes to pay for school finance equalization, voters scrapped the property tax system for schools.

My explanation for Prop 13 has become the conventional wisdom among scholars of local public economics (e.g. Bruce Bartlett, New York Times, June 4, 2013). The conventional wisdom attracts critics, and I have addressed the concerns of the most articulate, Kirk Stark and Jonathan Zasloff (2003) and Isaac Martin (2006), in my 2004 and 2009a articles, respectively. I don't think of my *Serrano*-Prop

13 theory as having been proved. It wins mainly by default: there aren't any other plausible theories to explain it within the intellectual space of modern political economics. Its relevance is chiefly grounded on the durability of Prop 13. Despite the enormous mischief it has caused in California, Prop 13 is the most untouchable political topic, the "third rail" of California politics. (Odd how a caution about New York City subways is well understood in California.) It is likely to persist, I submit, as long as the rigorous demands of the *Serrano* decision persist. For the time being, Prop 13 can be viewed as the logical consequence of attempting to make the property tax into a true tax.

Readers might reasonably ask whether fiscal zoning has changed in California since the property tax became a much less important factor in local decisions. Some observers expected that the *Serrano* decision and Prop 13 would encourage localities to accommodate more low income housing, which would be less of a burden once schools were no longer financed from local property taxes. There is some evidence that richer people started moving back to the cities (Aaronson 1999), but none that suggested that suburbs were opening up to the poor. Indeed, the move by the rich to cities is coincident with larger cities becoming more exclusive than before (David Schleicher 2012).

School district lines are still strongly capitalized in California, perhaps because homebuyers now value peer effects more than differences in school spending, which are now negligible. A district's test scores, not its spending, are now the markers of a better school district that homebuyers care about. Local governments now favor commercial land uses that generate more sales taxes rather than higher property values (Paul Lewis 2001). Housing developers are asked to finance more infrastructure and pay more in exactions and impact fees (Dresch and Sheffrin 1997). And a larger fraction of local public services are now provided in the private sector in the form of homeowner associations (Ron Cheung 2008). Private school enrollments among high-income families have risen significantly after the passage of Prop 13 (Brunner and Sonstelie 2006). Rather than creating the more egalitarian system desired by the *Serrano*-plaintiffs, more affluent Californians have removed themselves from the public sector and left the rest of the population to attend overcrowded schools and endure severely constrained public services. Perhaps the old property tax system was not so bad after all.

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