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Abstract

The Tiebout hypothesis transformed the scholarly understanding of local government by casting citizens as consumers who "vote with their feet" for preferred communities within a metropolitan area. The idea that citizens shop for governmental bundles of services and amenities, just as they might shop for other products, is now a familiar element in local government discourse. But the contributions of Tiebout's ideas to land use policy have been limited by an insufficient specification of the products that the consumer-voters select with their feet. This chapter, prepared for a forthcoming edited volume, examines a key element that drives the choices of Tiebout's consumer-voters - exclusion.

Exclusionary land use controls attract some consumer-voters even as they repel other consumer-voters. To understand why and how exclusion matters to the Tiebout hypothesis, it is necessary to parse both sides of the jurisdictional choice equation: the reasons that exclusion is such an attractive part of the bundles selected through residential choice and the limits on residential choice that result from such exclusion. Land use controls have, of course, received significant attention from scholars working within Tiebout's framework. However, the literature lacks a synthesized account of the way that the various strains of exclusion factor into the consumer-voter's shopping experience and fit together to inform and qualify the Tiebout model's contributions to the law of land use. This chapter takes up that task.

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Exclusion's Attraction: Land Use Controls in Tieboutian Perspective, in THE TIEBOUT MODEL AT FIFTY: ESSAYS IN PUBLIC ECONOMICS IN HONOR OF WALLACE OATES (William Fischel, ed.) (forthcoming Lincoln Institute of Land Policy 2006)

Chapter 6

Exclusion's Attraction: Land Use Controls in Tieboutian Perspective

Lee Anne Fennell

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The Tiebout hypothesis transformed the scholarly understanding of local government by casting citizens as consumers who "vote with their feet" for preferred communities within a metropolitan area (Tiebout 1956). The idea that citizens shop for governmental bundles of services and amenities, just as they might shop for other products, is now a familiar element in local government discourse. But the contributions of Tiebout's ideas to land use policy have been limited by an insufficient specification of the products that the consumer-voters select with their feet. This chapter examines a key element that drives the choices of Tiebout's consumer-voters -- exclusion. Exclusionary land use controls attract some consumer-voters even as they repel other consumer-voters. To understand why and how exclusion matters to the Tiebout hypothesis, it is necessary to parse both sides of the jurisdictional choice equation: the reasons that exclusion is such an attractive part of the bundles selected through residential choice and the limits on residential choice that result from such exclusion.

Land use controls have, of course, received significant attention from scholars working within Tiebout's framework. Bruce Hamilton (1975, 1976) established that, as a fiscal matter, zoning stabilizes the choice sets open to residents. Other work has studied the way that zoning addresses uncertainty for those choosing a place to live (e.g., Henderson 1980; Epple, Romer, and Filimon 1988). Moreover, the significance of neighbors' characteristics—a potential product of exclusion—has not gone unrecognized in the literature on local public goods (e.g., Downs

1973; Oates 1981). But the literature lacks a synthesized account of the way that the various strains of exclusion factor into the consumer-voter's shopping experience and fit together to inform and qualify the Tiebout model's contributions to the law of land use. This chapter fills that void.

What's in the Foot-Shopper's Basket?

In Tiebout's (1956) model, local governments offer different bundles of services and amenities catering to different tastes, and individuals select among them, revealing their preferences in the process. In this account, the choice process focuses on governmentally supplied goods. However, a number of other items that come bundled with these local public goods also influence the consumer-voter's choice. To see how exclusion fits into the Tieboutian landscape, it is first necessary to clarify the nature of the bundled choice that consumer-voters make when they select a residential location.

The Bundled Residential Decision

To begin, consider the highly simplified version of Tieboutian choice depicted in figure 6.1.

[Figure 6.1 about here]

Here, each letter represents a different political jurisdiction within a metropolitan area. The oval boundary represents the entire metropolitan area, within which our protagonist must locate if she is to enjoy the agglomeration benefits associated with metropolitan life. If we suppose that each jurisdiction provides a specific bundle of local public goods, then we might say that the foot-shopper's task is simply to select a local government from the metropolitan array much as a grocery shopper chooses a product from the shelf. Instead of pulling an item from the shelf, however, the foot-shopper makes her purchase by actually entering the selected jurisdiction through residential choice. Here, the square represents the consumer-voter's choice to locate in jurisdiction G.

But one cannot select a local government a la carte. It is physically impossible to put a desired jurisdiction's local public goods into one's shopping cart without also bringing along a physical structure (the residence one chooses), a place in a specific neighborhood, and a set of

neighbors (e.g., Schelling 1971; Yinger 1981). The location of the selected residence has implications that far transcend the bare fact that the structure lies within one political jurisdiction rather than another (Hamilton 1983, 101), including its proximity to workplaces and to other jurisdictions that may provide benefits to or impose costs on the homeowner. Figure 6.2, which captures the influence of location and spillovers at several scales (cf. Ellickson 1993, 1325, fig. 2), provides a closer approximation of the consumer-voter's choice.

[Figure 6.2 about here]

The small black square within the innermost oval represents the home that is selected by the consumer-voter. As before, we could say that she is "voting with her feet" in selecting jurisdiction G and that she is thereby choosing the local public goods offered by G. But she is choosing more than that in selecting a home. Most obviously, she is purchasing a property interest in the physical structure itself and the site on which it is located.[1] She is also purchasing a set of spillovers from very close neighbors that will directly impact her use and enjoyment of her home. This "direct spillover zone" is represented in figure 6.2 by the small grid area around the center square.

In addition, she is buying a daily living environment in a particular neighborhood and section of the metro area, represented by the circle with the solid line in figure 6.2. The daily living environment will contain not only many physical elements that may be significant to the homebuyer's quality of life (stores, parks, traffic, schools, and so on), but many sets of people with whom she will interact, including those who attend the same schools, clubs, gyms, and places of worship as members of her household, as well as those who make use of nearby shops, parks, libraries, walking paths, museums, and so on (e.g., The Kaiser Committee 1972, 186; Rothenberg 1972; Jackson 1975). As indicated, part of this daily living environment lies beyond her jurisdiction's boundaries; the homebuyer's quality of life will therefore be influenced by the spending patterns and policies of the neighboring jurisdictions, as well as those of the jurisdiction in which she chose to reside. Both the daily living environment and the direct spillover zone will be directly influenced by the behavioral characteristics of neighbors who occupy those respective areas.

The homebuyer is also buying a set of commuting options for various points of interest in the

metropolitan area, notably her current or potential workplace and those of other working members of her household. The people in Tiebout's stylized model live off dividend income and do not have workplaces to which they must commute, nor do they have any desire to consume extrajurisdictional amenities such as the educational, recreational, or cultural opportunities that might be available in neighboring towns or cities. If those simplifying assumptions are relaxed, it begins to matter not only what the local government can offer, but also where the jurisdiction is relative to other sites.

The outer dashed circle in figure 6.2 represents the homeowner's feasible commuting range from the selected home. In this case, her commuting range covers over half of the metropolitan area. The commuting range, like the daily living environment, is sensitive not only to the jurisdiction selected, but also to the location selected within the jurisdiction. The depiction of a single feasible range of commuting options is an obvious simplification; in fact, it would be possible to attach specific exercise prices (including the opportunity cost of time) to hundreds or thousands of different door-to-door trips from the selected home, including some that are far outside the given range. The radius of the dashed circle should be understood as an approximation of the maximum distance that the average homeowner could afford to travel round trip on a daily or near-daily basis.

As Tiebout suggested, the homebuyer is also selecting a bundle of local public goods; these will be paid for (in whole or in part) by property taxes. The local public goods that the homebuyer receives are not entirely produced by jurisdiction G, however. First, the homebuyer will consume local public goods not only in her home jurisdiction, G, but also in a number of other jurisdictions. She will frequently consume local public goods in jurisdictions H, C, and D, in which portions of her daily living environment are located. She may also take advantage of some of the local public goods offered by other jurisdictions within her commuting range: B, F, J, K, and L (Heilbrun 1972, 538). In some cases, jurisdictions will be able to exclude nonresidents from consuming the jurisdiction's local public goods, but some benefit spillovers from adjacent jurisdictions are likely to occur (Musgrave 1969, 300).

Additionally, even those goods that are produced and consumed within jurisdiction G may not be exogenously provided by the local government. The cost and quality of many local public goods, such as public safety and education, depend on the behavioral characteristics of the other people consuming those goods (e.g., Schwab and Oates 1991). Hence, part of what the

homebuyer is purchasing along with the house is a set of coproducers who will be responsible collectively for much of the value that she will receive from many of the local public goods offered in G.

Finally, the homebuyer is obtaining a political and social address when she selects a home. Politically, the homebuyer is becoming a member of not only the selected local government, but also of any other local or regional political jurisdictions that encompass the home in question (such as special assessment districts, school districts, or regional governments) (e.g., Ladd and Yinger 1989, 145–166). The political goings-on in adjacent jurisdictions may also have the power to influence the homebuyer's experience, and the homebuyer in turn may be able to have some influence on the political process in the adjoining jurisdictions even though she cannot vote in them. She might, for example, join a rally, become involved in an interest group coalition that has power across jurisdictional lines, or pressure her own government to engage in formal or informal interlocal arrangements with the neighboring jurisdiction (e.g., Gillette 2001).

The purchased home also comes with a "social address": the place name with which the home is most closely identified. This place name represents a local public good for the households that share it and can be understood as performing a branding function that communicates quality levels to acquaintances, business associates, and potential purchasers. In central cities, neighborhoods often carry their own familiar brand names, such as the Castro in San Francisco, Hyde Park in Chicago, and Georgetown in Washington, DC (Gillette 2001, 203–204). In suburbs, the jurisdiction name is more likely to be the "brand name" identifier, although smaller subsets of the jurisdiction, such as private neighborhood developments, may become known by their own names.

Hence, what one purchases when choosing a home can be understood in shorthand form as comprising five bundles of attributes:[2] (1) the home's physical attributes ("the house"); (2) the home's "environmental" or atmospheric attributes, both in the direct spillover range and in the larger daily environment ("the living environment"); (3) the home's locational attributes relative to other sites of interest ("the commute options"); (4) the services and amenities offered by the local jurisdiction, including those partially produced by other residents, as well as services and amenities in neighboring or overlapping jurisdictions to which one has access ("local public goods"); and (5) the home's political and social address. Under conditions of full capitalization, differences in these attributes are priced into the home itself (e.g., Stiglitz 1983, 41–42; Fischel

2001).

Special Characteristics of the Product

Tieboutian choice involves a complicated product, to be sure, but can it nonetheless be usefully captured with the shopping metaphor that Tiebout introduced? Here it is helpful to consider five ways in which the product the homebuyer selects through residential choice is different from most ordinary consumer products. Some of these differences suggest that a more useful analogy to Tieboutian choice is that of a diner choosing a restaurant. In both cases one buys a particular item (a house or a meal) into which have been capitalized many attributes of interest that will unfold over time, that are subject to interdependencies and congestion, and that are not fully under the control of the management one has chosen (the local government or the restaurant owner). Although the restaurant metaphor is not perfect, it helps to highlight the features that give exclusion a central role in jurisdictional choice.

It is possible to have too many customers.

For producers of ordinary consumer goods, attracting more customers is usually considered unambiguously desirable. Communities are different in this respect, a fact that Tiebout makes explicit in his discussion of optimum community size (1956, 419–420). At some point, communities will not be interested in attracting residents and will seek to dissuade additional entry. As in a restaurant setting, the potential for congestion limits the number of new entrants that can be accommodated without an increase in the average cost or a decrease in the average quality of the services and amenities (Oates 1981, 95). Given the inability to charge each entrant at a level that would equate to the marginal cost of extending service to him (id. at 93), it is possible to have "too many" customers.

Some parts of the bundle are not priced explicitly.

When one purchases a bundled consumer product, such as a laptop computer with software already installed, the breakdown of the various components in the total price may or may not be transparent. Regardless, every piece of the package is part of an explicitly priced bundle, and no piece of the package can be consumed without buying the full bundle.

Restaurants, like jurisdictions, consist of priced and unpriced elements. One ostensibly pays

"for a meal," but one buys more than just the meal: One receives waitservice, an eating environment, and a particular restaurant location. The tax and the tip capture some of these additional elements, but they are priced based on the cost of the meal itself, rather than on a pro rata share of the other elements consumed. Likewise, one pays for a house and pays property taxes based on that house purchase; one does not pay à la carte for the local public goods one uses.

The use of priced items to allocate the cost of unpriced items opens up the possibility that customers will attempt to consume the unpriced items without paying for a "fair share" of them via the priced items. For example, one could enjoy a fine restaurant's wonderful ambience, gorgeous views, and delightful service at a bargain price if one could occupy a choice table for hours while consuming nothing but coffee. Likewise, because local public goods are funded with property taxes rather than head taxes, one could obtain a local public good at a bargain by occupying an inexpensive home in a high-service area (Hamilton 1975, 205). The bargain would not be a permanent one, to the extent that the fiscal difference is capitalized into the home's price (Hamilton 1976, 744; Rubinfeld 1985, 592 n. 22), but the initial entrant could obtain the benefit of cheaper public services at the expense of those occupying more expensive homes.

A similar point can be made about local public goods produced by nearby jurisdictions within one's daily living environment or commuting range. While these goods are not priced into one's tax burden in one's home jurisdiction, they may be capitalized into the value of the home itself.

Customers and noncustomers generate spillovers.

When one purchases a consumer good such as a toaster, the value of the product is typically unaffected by the actions or characteristics of other consumers of the product. Likewise, local spillovers in one's general environment do not usually have a large impact on the value of a product; most products can be transported and used in another location instead. Residential housing, like a restaurant meal, must be consumed on-site and in the immediate presence of other consumers (e.g., Diamond and Tolley 1982, 6; Hamilton 1983, 101). Often, the consumption will also occur within range of spillovers generated by noncustomers—that is, the acts of people or governments in adjacent jurisdictions. These spillovers, which may be positive or negative, can dramatically affect the value of the good one is consuming.

Consumers are also producers.

Perhaps the most important difference between ordinary products and communities is that the consumers are themselves also coproducers of many of the most important local public goods (e.g., Schwab and Oates 1991). Residents of a local jurisdiction often directly influence the cost and quality of local services (e.g., id.; Oates 1977; Ross and Yinger 1999, 2038). It has been well noted that goods like education and public safety depend not just on exogenous inputs (teachers, school buildings, police officers, patrol cars), but also in large part on the characteristics and behavior of people who are ostensibly "receiving" the services: an elementary school's students or a neighborhood's residents (e.g., Oates 1977; Dynarski, Schwab, and Zampelli 1989; Schwab and Oates 1991; Manski 1992).

A school attended by well-prepared, well-nourished, motivated students will produce a better education for the same dollars, and a neighborhood populated by concerned, law-abiding, safety-minded citizens who watch out for each other will produce higher-quality public safety. Other local public goods are affected to a greater or lesser degree by characteristics or behavior of one's co-consumers (Diamond and Tolley 1982, 30). As just noted, one important local public good that the consumers produce is the social meaning of one's residence in a particular jurisdiction or neighborhood. The stock of a particular place name will rise or fall depending on the perceived characteristics of the people with whom it is associated.

Customers shape the product by voting.

Finally, as the Tiebout model emphasizes, residents in a municipality are both market and political actors—consumers and voters (Rose-Ackerman 1983). As consumers, they choose a product, but as voters, they participate in shaping the product (Ross and Yinger 1999, 2003). This element of political control makes the residential choice different in kind from other market choices. Although the relationship between political choice and choice through mobility is not entirely clear cut (e.g., Epple and Zelenitz 1981; Yinger 1981), the fact that both processes occur simultaneously has some interesting implications (Ellickson 1971; Ross and Yinger 1999, 2022).

In the local government context—at least outside of the central city—political incentives can be understood by reference to the median voter model (e.g., Ross and Yinger 1999, 2019). Fischel (2001) maintains that the median voter will produce results that resemble those that

might be produced through private market activity responsive to consumer demand (Oates 2006). Because the composition of the political body determines the position of the median voter, and thus the ultimate shape of the products that are provided by local government (Bogart 1993), the political preferences of one's co-consumers become important.

Time, Interdependence, and Uncertainty

The preceding discussion provides a rough inventory of the items comprising the bundled residential choice, as well as a catalogue of the bundle's special characteristics. But to fully understand the nature of the product, and the place of exclusionary land use policies within it, two additional factors bear emphasis. First, a home will be held over time for eventual resale. Second, the values of many of the bundled items turn on interdependent decisions made by other homebuyers.

The housing bundle ultimately produces two things for the buyer: a stream of consumption that continues for as long as she owns the house and a gain or loss on resale (e.g., Walters 1975, 41; Pozdena 1988, 82). Hence, the homebuyer's choice is only partly about consumption preferences; the purchase is also an investment. The buyer must not only select a package that she finds attractive, but she must also select a bundle that will continue to prove attractive to others on the resale market. She must worry not only about her own preferences in neighbors and her own predictions about the impacts of particular neighbors on local public goods, spillovers, the fisc, social reputation, and so on, but also about what potential homebuyers will think about all these factors (e.g., Fennell 2002, 646–648). As a result, even a homeowner who thinks of herself as quite progressive and enlightened may support exclusionary measures, telling herself that she must defer to the beliefs and preferences of members of the less-enlightened target audience to whom she will someday need to sell her home (id.; see also Massey and Denton 1993, 94–95).

The condition of the house itself—its maintenance and any renovations or improvements made to it—is the only strand of the bundle that the homeowner can personally control over time. Even then she will be subject to the regulatory regime in which the home is located, as well as to external factors such as weather patterns and vandalism rates. The other components of the housing bundle, such as the aesthetics of the living environment, are out of the individual homeowner's control (e.g., Jackson 1975, 4; Diamond and Tolley 1982, 8). Examining the

components as they exist at the time of the purchase provides only a snapshot that is already on its way to becoming outdated by the time of the closing.

Closely related is the fact that each resident's home purchase exhibits important interdependencies with those of other residents. Where interdependent locational choices are distributed over time, early choices can influence or constrain later choices. While uncertainty is a pervasive feature of temporally distributed interdependent choices, early entrants in a community face particularly high levels of uncertainty and are likely to be eager to employ devices that will control the trajectory of future development—even when it means constraining their own land use options (Epple et al. 1988, 133). Later entrants have the advantage of being able to observe the results of the earlier choices; however, they face a smaller choice set. Not only do early decisions create path dependencies in overall spatial arrangements, some of those decisions have the power to systematically restrict entry.

These dynamics will be explored in more detail below. For now, it is sufficient to emphasize that the selection of a home from among the available possibilities means choosing not a static product but a dynamic bundle of expectations that will unfold over time as interdependent choices are made. In this context, exclusionary policies act as "product stabilizers" that have the potential to lower the uncertainty associated with time and interdependence; this decreased uncertainty holds positive value for many homebuyers (Delafons 1969, 28–29; Poindexter 1995, 12). Because residential bundles that have not been stabilized in this way will have difficulty competing with those that have been so stabilized, exclusionary land use policies play a central role in Tieboutian choice.

The Role of Exclusion in Jurisdictional Choice

Land use controls can be viewed as collective property rights that are held by the community (Nelson 1977, 15–18). By limiting the uses to which land may be put, such controls can and do serve purposes apart from exclusion. For example, zoning restrictions can enable communities to overcome tragedies of the commons and to produce aesthetic and environmental results that could not be achieved without some form of centralized coordination and enforcement. As a result, it would not be unusual for a community with a stably fixed population to adopt land use controls designed to prevent individuals from engaging in self-interested behaviors that would generate harmful spillovers for neighbors. Such controls would have

traction quite apart from any desire to alter or stabilize the community's composition.

However, the control of land use often has the predictable effect, and sometimes the conscious motive, of controlling the number, concentration, or characteristics of residents. In assessing the degree to which a land use control is exclusionary in this sense, one might look at the effects of the control, at the motivations of the voters responsible for the political result, or at some combination of the two. These are ultimately empirical questions. Significantly, a given policy may directly affect the consumption and behavior patterns of residents rather than—or in addition to—altering the composition of residents (Pogodzinski and Sass 1990). For example, a zoning restriction that specifies a particular minimum lot size could have one of two effects on a household that would prefer to consume a smaller lot size in that jurisdiction. The household might choose a different jurisdiction with a lower minimum lot size or might go ahead and consume the required additional housing in the subject jurisdiction. While either choice may involve distortions, a land use control that generated only decisions of the latter sort would not be exclusionary.[3]

Where a land use control has the effect of excluding segments of the population, we might define it as exclusionary, at least where motives exist for the kind of exclusion at issue. Of course, identifying interests that are served by the adoption of exclusionary land use controls does not establish that any particular land use policy was so motivated. Nonetheless, it is useful to consider the array of motives that residents might have for constricting entry into a jurisdiction.

Exclusionary Motives

There are a number of distinct motives for exclusionary land use controls, encompassing fiscal, spillover-related, public goods, political, and monopolistic considerations (Bogart 1993; Dietderich 1996, 31; Ellickson and Been, 2005, 769–770). These motives, which closely track the special product characteristics just highlighted, can explain why exclusionary land use controls are generated through the political process and why they prove attractive to those making choices among jurisdictions. The broad array of motives suggests that exclusion through land use controls is often intentional and overdetermined.

To be sure, it may be impossible to tell from the content of an exclusionary measure what motivated it (Bogart 1993, 1670). For example, a large minimum lot size might represent either

"fiscal zoning" or "public goods zoning," or it might, indeed, contain elements of both or derive from yet another motive for exclusion (Mills and Oates 1975, 8; Bogart 1993). This difficulty would be significant if different normative implications flowed from exclusion prompted by different motives (Bogart 1993). Yet, some of the most troublesome implications of exclusion are generated regardless of the precise motive involved, as we shall see.

Fiscal Motives

Because it is not possible to charge each incoming member of the community a tax rate that matches the marginal cost of extending local public goods to her, two problems may result. First, as suggested by the discussion of optimum community size, people may enter the community beyond the efficient point. Second, as suggested by the discussion of unpriced elements, people may contribute too little to the tax base relative to the goods and services they consume.[4]

Hence, one motivation for exclusionary land use controls is purely fiscal. As Bruce Hamilton (1975) has explained, setting a minimum housing purchase through zoning forces payment of a minimum share of property tax. Pressure for fiscal zoning comes not just through the political process, but also, potentially, through the mechanism of Tieboutian choice. A homebuyer selecting a residence must factor into the housing choice the projected impact of taxes and local public goods over time on the value of the house. The chance that newcomers will come in and consume less-expensive housing (or otherwise increase costs relative to tax payments) will be part of that calculation.

An influx of lower-income households that increases service costs without proportionately increasing tax revenues would shift larger tax burdens onto those caught owning more expensive homes at the time of the influx (Fischel 2001, 69). The resulting property tax disadvantage would be capitalized as a reduction in the value of the more costly houses. As a result, a homebuyer will be attracted to jurisdictions that place limits on any future expansions of housing that would upset the relationship between taxes and benefits existing at the time of her entry into the community.

Spillover-Related Motives

The desire to limit negative externalities and to gain the benefit of positive externalities

within a neighborhood or larger living environment can also drive exclusionary decisions (Bogart 1993, 1671–1672). Some land use controls attack spillovers directly (for example, by controlling the aesthetics of a residential area), while others are designed to screen residents based on their perceived propensities to generate negative or positive spillovers.

The problem is complicated by the possibility that those harboring prejudices may view the mere existence of certain resident characteristics as producing negative spillovers. So racism and classism may trigger exclusionary efforts (e.g., Ford 1994). To the extent these prejudices are widely shared, property values may be affected through capitalization. The fear of such impacts on property values may cause current homeowners to support exclusionary decisions even in the absence of personal prejudice.

Public Goods Motives

The fact that the consumers of local public goods also coproduce those goods provides another motive for exclusion. As already noted, the consumers of some of the most important local public goods—education and public safety—contribute directly to the production and cost of these goods through peer and neighborhood effects. Suppose that some co-consumers—call them "quality-enhancing users"—will make positive contributions, whereas others—"quality-detracting users"—will do the opposite (Fennell 2001; Schwab and Oates 1991, 220–230; Ross and Yinger 1999, 2044; see also Becker and Murphy 2000, 12). Jurisdictions have an incentive to attract the former and exclude the latter. Because the propensity to be a quality-enhancing user is not observable, some proxy must be used instead. If there is a perceived correlation between the quality of local public goods achievable at a particular cost and the socioeconomic backgrounds of the residents, land use controls may be consciously employed to limit entry to households in a certain income or wealth stratum (Ross and Yinger 1999, 2015).

One of the local public goods that the populace may produce is exclusivity itself (Dietderich 1996, 55). Consider the special local public good inhering in the status (or lack thereof) that comes with a residential place name. Some exclusion may be motivated by an effort to avoid dilution or tarnishing of the place "brand." For example, wealthy homeowners might fear that the entry of lower-income residents would produce a "down at the heels" image for the community.

Political Motives

As voters, residents determine the levels and types of local public goods that the jurisdiction will produce. To the extent that residence within the jurisdiction is both a necessary and sufficient condition for contributing to political outcomes, controlling the entry and exit of residents also means controlling the political apparatus through which decisions are made about local public goods.[5] Local governments may be viewed as placing central control in the hands of that abstraction known as "the median voter" (e.g., Fischel 2001, 87–89). If current and potential voters within the jurisdiction occupy a range of positions with regard to local public goods, entry and exit can change the identity of the decisive voters in the median voter model, hence the political outcomes (e.g., Rose-Ackerman 1983, 65).

Thus, where the entry of residents cannot be decoupled from their participation in the political system, decisions about entry and exit necessarily implicate the decision-making apparatus. Land use policies that stem entry into the jurisdiction freeze in place a political apparatus for deciding about local public goods (Poindexter 1995, 15). Jurisdictions that would like to grow without feeling threatened politically may resort to land use policies that screen the population that enters the jurisdiction. The voters who control political outcomes would wish to select entrants that replicate as closely as possible the prevailing preferences within the jurisdiction. The resort to exclusionary devices that would make a jurisdiction "self-replicating" creates a feedback loop in which the political process produces zoning regulations that perpetuate the political processes that continue to maintain the zoning regulations, and so on (Ford 1994, 1871).

It is also possible that new entry will alter the distribution of social status or other relational goods within a jurisdiction (Frank 1985; Jencks and Mayer 1990, 116-117). Having gone to the trouble to "choose the right pond" (Frank 1985), current residents may be deeply invested in making sure that the pond remains "right." Interestingly, these political and social considerations could create pressures to exclude not only lower-income households, but also higher-income people whose entrance would otherwise appear desirable on fiscal and public goods grounds.

Monopolistic Motives

The fact that the bundled residential choice is an investment destined for eventual resale in a spatially sensitive market provides another possible motive for exclusionary land use controls.

Constriction of the housing supply carries the potential to increase the home's resale value (e.g., White 1975, 73–74). Thus, a homeowner might wish to work through the political system to limit the supply of housing in her jurisdiction and thereby make her resale home relatively more scarce. Anything that helps to make the bundle of housing services in a given jurisdiction (or portion of a jurisdiction) uniquely valuable—whether an innovative local government, a choice location, access to natural resources, or any other factor—reduces the degree to which housing elsewhere offers a close substitute. The more unique a jurisdiction is, the more plausible exclusionary zoning becomes as a strategy for obtaining monopoly profits (Ellickson 1977, 400–403).

A countervailing factor involves the positive spillovers that the homeowner might enjoy as a result of the contributions to agglomeration effects that the new development would bring. Perhaps the influx of new residents on the edge of town will support the introduction of shops or services that the homeowner desires or that her future buyers might desire. Or perhaps the new entrants will add more to the tax base than they will consume in services (or will attract businesses that will do so). Even in such cases, however, the homeowner might demand land use controls that keep such entry in distant quarters of the jurisdiction to reduce the degree of substitutability.

Exclusion's Place in the Tiebout Model

Exclusion, put simply, is attractive. It promises stable or increasing home values, and thereby induces homeowners to enter the jurisdiction. At the same time, exclusion is choice-inhibiting; the excluded have fewer alternatives open to them as a result. Tiebout's ideas cannot be fully appreciated without taking into account the place of exclusion both as an attractive item in the bundles available to consumer-voters and as a constraint on the choice sets that consumer-voters encounter. Specifically, it is important to consider how the Tieboutian focus on exit and sorting is conditioned or qualified by an emphasis on the role of exclusion in jurisdictional choice.

Exclusion Versus Exit

The Tiebout hypothesis proceeds on the assumption of perfect mobility – the ability to costlessly exit when conditions prove unsatisfying (e.g., Been 1991, 508). One reaction to the

previous discussion might be to ask whether exclusion is really all that important if exit remains available. That exit is not an acceptable substitute for zoning was established by Hamilton (1975), who raised the specter of the poor endlessly chasing the wealthy from jurisdiction to jurisdiction. If mobility is costless, being "chased" would itself impose no costs; the well-off would move frictionlessly from place to place, one step ahead of the poor. But the problems run deeper. Under conditions of full capitalization, all of the negative factors that trigger the consumer-voter's desire to flee the jurisdiction, including expectations about future value drops, have already been incorporated into her home's (now-lowered) value. She may still choose to exit, but doing so will not help her recoup her loss.

Will her departure nonetheless punish the jurisdiction that she exits? Not directly. Unlike a purchaser of a low-stakes consumer product who can walk away from a bad experience, a departing homeowner must find someone willing to buy her property before she can stop purchasing the local government's package through her tax payments—that is, she is responsible for recruiting a "replacement customer" (Oakerson 1999, 110–111). To find a replacement requires dropping her asking price to compensate the new buyer for the suboptimal portions of the package (Yinger 1981, 101). Because of this dynamic, Tieboutian choice may not produce efficient outcomes on its own where capitalization exists; voting with hands as well as with feet is required (e.g., Epple and Zelenitz 1981; Yinger 1981).

Moreover, moving is itself costly (Ladd and Yinger 1989, 293–294). In addition to the out-of-pocket and opportunity costs of moving one's household, movers lose whatever site-specific investments they have made in the home and neighborhood, including social capital. The prospect that one will have to move devalues the package one purchases upon entry into the neighborhood and deters socially valuable investments in the local community. From a homeowner's perspective, then, exit is an imperfect response mechanism. The standard alternative to exit is political action, or voice (Hirschman 1970). Residents who face falling home values might be expected to agitate for changes that will restore their home's value or at least arrest its fall. Exits and failures to enter that negatively impact home values will lead politically powerful homeowners to place pressure on the political apparatus—not by threatening to leave, but by threatening to withhold votes from the incumbents if the factors inducing a value-eroding exodus are not corrected (Fischel 2001). Tiebout-style choice generates responsiveness in this story through the mediation of politics. Yet, political responses become

vulnerable and unstable once population changes are underway. Where exit generates entry that fails to replicate the existing political composition, power can shift to a contingent holding different preferences.

Consider how exclusion, a prophylactic alternative to both exit and voice, addresses these concerns. Land use policies that stabilize home values through exclusionary mechanisms are self-executing political products that make voice less necessary; they are also entry-inducing features designed to make future exit less necessary. Exclusion might be understood as a form of preemptive exit that operates prospectively to prevent drops in one's home value. Entering a jurisdiction with land use policies that limit entry makes one's exit from the previous jurisdiction (or choice not to enter other jurisdictions) meaningful: The people and politics that one has left behind (or chosen not to join) cannot follow along to the chosen jurisdiction. If the factors that would potentially make one want to exit are fundamentally bound up in the people with whom one might be grouped or the political decisions that might be made by the local jurisdiction, then exit could be made unnecessary by finding ways to control or foreclose entry.

Jurisdictions will rarely wish to engage in complete and categorical exclusion, however. Instead, municipalities will fine-tune the kind and degree of exclusion to make themselves as attractive as possible to the citizens that they wish to attract and retain. The typical result will be selective land use policies that operate as screens or filters, not as impenetrable barriers to all growth.

Sorting, Screening, Matching

The notion of sorting is also central to the Tiebout hypothesis. Yet, the term *sortin*g is ambiguous—both as to the persons or things doing the sorting and as to the dimensions along which sorting occurs or ought to occur. The usual image of Tieboutian jurisdictional choice posits self-sorting based on attractions arrayed before the shopping consumer-voters by the local governments. People "sort with their feet," on this account; the individuals being sorted are also the ones doing the sorting. But the process is more complicated than that.[6] For the reasons just detailed, many jurisdictions do not stand ready to welcome all comers; rather, the intake valves of many jurisdictions feature screens that constrain entry. Such limiting devices hamper the free-form self-sorting in which households might otherwise engage. Making matters more interesting, the shape and size of the intake screens—that is, the content of land use controls—serve to

attract those who are capable of making it through the screen.

Under these conditions, each exclusionary device concretely limits the alternatives open to those who are shut out, even as it helps to attract those who wish to avoid being grouped with those who are excluded. Of course, screening devices are not given by nature but rather are political products that are designed to keep current residents happy while attracting the preferred mix of new residents. When active screening is added to self-sorting, the picture is less one of open-ended shopping and more a dynamic process of matching households to jurisdictions based on some mix of the preferences of homebuyers and the preferences of other residents.

In Tiebout's account, self-sorting among jurisdictions is important because it reveals citizens' demand for local public goods, leading to the efficient provision of those goods. For jurisdictional choice to be revelatory, the decision to locate or stay within the jurisdiction must be both voluntary and driven at least in part by the local public goods offerings. As the number of jurisdictions is limited (either by exogenous factors or by the installation of "intake screens" in the form of land use restrictions), one's locational decision becomes less and less revelatory. At the limit, an individual facing a single jurisdictional choice within a given metropolitan area would reveal little about her demand for local public goods by "choosing" to reside within the jurisdiction (Frug 1998, 31). More generally, strong preferences about other parts of the residential bundle, especially location, may lead homebuyers to enter or remain in jurisdictions despite suboptimal local public goods provision.

That the Tieboutian sorting process involves elements of screening and exclusion should not be surprising given Tiebout's discussion of congestion and optimum community size and given Hamilton's recognition of the limits of the property tax as a device for enforcing public goods contributions. But the point bears emphasis. Coercive governmental action in the form of land use controls structures Tiebout-style choice; matters are not simply left up to the market (e.g., Miller 1981, 185; Dietderich 1996, 42; Donohue 1997). This is important, because Tiebout-inspired normative arguments gain much of their appeal by suggesting that jurisdictional choice represents a marketlike exercise of consumer sovereignty (Donohue 1997).

Legal and Policy Implications

The balance of the chapter considers the legal and policy implications of the foregoing analysis from two perspectives. First, we examine mechanisms for exclusion in light of the

multiple motivations detailed earlier. Second, we preview a theory of associational entitlement that would take seriously the collective action problem presented by residential grouping patterns.

Exclusionary Mechanisms

The shape that exclusion takes (who is excluded and how) depends in part on the relative strength of each of the several motives for exclusion and in part on legal restrictions that place off limits certain alternatives. The federal Fair Housing Act and other antidiscrimination laws preclude any overt exclusion based on protected characteristics, such as race, and outright income or wealth requirements to enter a jurisdiction also appear to be outside of the feasible policy space (Stiglitz 1983, 46). Widespread exclusionary devices include limits by housing type (for example, limiting an area to single-family homes) and minimum lot size requirements (Span 2001, 8–9; Ellickson and Been 2005, 788). Inside common interest communities, additional controls typically limit aspects of homes' design, color scheme, and building materials (Nelson 2005). Other exclusionary devices include moratoria, quotas, or other limits on the amount or speed of growth (Ellickson 1977, 390–391).

Goals, Proxies, and Unintended Consequences

Exclusionary mechanisms can be understood in light of the various goals that they serve. If the motivation for exclusion is fiscal, the goal is to collect sufficient property taxes for the services that the household will consume (and to exclude any household that cannot pay its share of taxes). Requiring consumption of a certain amount and kind of housing, such as a single-family home on a large lot, works to keep the property value, and so the property tax contribution, sufficiently high.[7] A simple head tax per household would more directly achieve the fiscal objective but would present other difficulties (Ellickson 1977, 398). Jurisdictions may also go beyond efforts to enforce "fair" tax payments and engage in what Michelle White (1975) has termed "fiscal squeeze zoning"—applying land use controls designed to extract a more than proportionate share of revenues from newcomers. Assuming existing homes would be exempt from the new zoning restrictions (Cribbet et al. 2002, 721), voters would be expected to support zoning restrictions that force the incoming residents to consume larger amounts of housing than they themselves consume (Ross and Yinger 1999, 2015).

Another form of fiscal zoning would involve consciously keeping out those who are likely to be costly to serve or who are going to consume large amounts of services. The usual targets of such efforts are families with children. While overt discrimination against families with children is prohibited (with some exceptions) by fair housing laws, local governments might attempt to steer development toward exempted housing for older persons or otherwise shape the housing menu in ways that would be expected to attract fewer families with children (Strahilevitz 2005). It should be noted, however, that political concerns would be expected to limit resort to both "fiscal squeeze" zoning and zoning for "low-service" demographic groups. Voters may be wary of population shifts that could change the political center of gravity and lead to unwanted changes in the types or levels of local public goods.

Exclusionary mechanisms may also be targeted at population characteristics or behaviors. Because there is no way to directly screen for the propensity to generate spillovers or make useful contributions to local public goods, a highly imperfect proxy is typically employed: the wherewithal to consume a home of the type and size required on a lot of the specified size. Similarly, a community that wishes to grow while keeping the same political balance may zone for similar housing types and sizes in the hopes that doing so will lead to replication of existing political characteristics.

Where monopolistic motives for exclusion are in play, the goal is to reduce the supply of good substitutes for existing homes. If it is impossible, legally or politically, to keep out new entrants entirely, existing homeowners might attempt to limit development to distant parts of the jurisdiction or to dissimilar homes. Interestingly, the desire to keep out homes that will be good substitutes may be in tension with the desire to replicate the existing population for fiscal, political, public goods, or spillover-related reasons. Homes that serve an entirely different market may compete less directly with existing homes but may introduce different income levels that will undercut other goals of exclusion.

To the extent that exclusion by housing type is used as a proxy rather than because of the spillovers directly produced by different housing types, the menu of available housing choices is artificially constricted. Where not all housing types are represented in all jurisdictions, consumers must choose a package that includes a home type that they are willing and able to buy. Tiebout did not discuss the house itself as part of the consumer-voter's choice—an omission that would be consistent with the assumption that any physical structure and lot size can exist in

any jurisdiction. The home and surrounding land might on this account be viewed as fungible "wrappers" in which the relatively unique local governmental bundles are delivered. If land use controls limit the type and style of housing in some jurisdictions, however, foot-shoppers would be unable to find a right-sized wrapper for their consumption of local government in all jurisdictions. This fact has implications for Tiebout's claim that jurisdictional choice reveals demand for local public goods.

Exclusion by lot size or housing type not only keeps out people who might otherwise prefer the mix of local public goods being provided in the jurisdiction, but it also distorts the housing choices of those who locate within the exclusive jurisdiction. A deadweight loss is produced if people consume more or different housing than they would prefer merely to win admission into the jurisdiction (Ellickson 1977, 397; Dietderich 1996, 32; Ross and Yinger 1999, 2015). Large lot zoning may lead people to consume more land or live at lower densities than they would otherwise choose (Pozdena 1988, 53). The overconsumption of space pushes the footprint of the metropolitan area outward, so people who need to aggregate together must come from further-flung suburbs and exurbs and will have larger distances to traverse (id. at 71). This cost increase is, of course, only partially internalized by the residents of the jurisdictions restricting density. The result may well be a tragedy of the spatial commons.

It is worth being precise about the resource that is overharvested in this story. It is not land as such but rather space that is instrumental in delivering the benefits of metropolitan agglomeration. If we assume that agglomeration benefits require some reasonable degree of physical proximity, then there is some distance between the component collaborative elements beyond which the benefits of collaboration are outweighed by what Melvin Webber (1963) has termed "communication costs." While this distance will vary depending on technological advances and the magnitude of the agglomeration benefits at issue, it is clear that "prime collaboration space" is a valuable commodity that jurisdictions do not bear the full costs of appropriating when they carry out exclusionary land use policies.

Scale of Exclusion

A jurisdiction can exclude on a whole-jurisdiction basis or can, instead, create internal zoning classifications that exclude only from portions of the jurisdiction (e.g., Vatter 2005; Calabrese, Epple, and Romano 2006). The scale of exclusion employed is important from two

perspectives. First, from the point of view of homeowners or potential homeowners, the scale should be large enough to "get the job done," which in turn will depend on what is motivating the exclusion. Second, from society's point of view, exclusion should take place at a scale that prevents other jurisdictions from drawing benefits from (or offloading costs onto) the subject jurisdiction but also at a scale that does not offload costs onto (or draw benefits from) other jurisdictions.

If enough simplifying assumptions are made, these two perspectives are not in conflict. A stylized vision of local public goods posits that everyone residing within the jurisdiction enjoys full levels of each local public good and that nobody outside of the jurisdiction enjoys any of the local public goods (Stiglitz 1983, 19). Such local public goods would fit a "club goods" or "limited access commons" model. They would be experienced as pure public goods inside the jurisdiction but would so successfully exclude outsiders as to look like private goods from the outside (e.g., id., 19; Ostrom, Tiebout, and Warren 1961, 834; Rose 1998, 155). In this setting, exclusion merely serves to separate those who are part of the "club" or limited-access commons from those who are not (Buchanan 1965, 13). The jurisdiction acts as a fully self-contained unit; by assumption, the jurisdiction is not expelling any externalities onto (or receiving any externalities from) its neighbors.

Where these simplifying assumptions do not hold, finding the right exclusion scale becomes problematic and contested. To take one obvious point of conflict, residents of a jurisdiction may want to push the costs of serving low-income people onto other jurisdictions. However, if low-income people must be served by *some* jurisdiction, their exclusion from the subject jurisdiction imposes an externality on other jurisdictions (e.g., Schragger 2001, 422). Likewise, the fact that other jurisdictions are bearing the costs of serving, protecting, and educating low-income people generates positive spillovers for the subject jurisdiction that it is not having to pay for. The flip side of this proposition is that jurisdictions that accept costly-to-serve residents may be the subject of cost-shifting by others. Collective action problems may keep jurisdictions acting independently from taking on an appropriate share of regional costs without bearing more than their share (Fischel 1985, 138–39; Gillette 1994, 1437; Lenon, Chattopadhyay, and Heffley 1996, 231). Faced with a choice between bearing too much and too little of the cost, jurisdictions are likely to choose the latter.

Left to their own devices, what scale of exclusion would jurisdictions choose? Or to put it

slightly differently, what kinds of exclusion would be attractive in the Tieboutian sense? The desired scale of exclusion will depend on the motive animating the exclusion. For example, fiscal zoning works best on a jurisdiction-wide basis. If taxes are collected and spent throughout the municipality, then zoning classifications that apply to only a portion of the municipality will not serve the head tax equivalency function attributed to zoning (Hamilton 1975). However, if the benefits derived from local public goods are unevenly spread throughout the jurisdiction, then intrajurisdictional zoning could conceivably serve fiscal purposes.[8]

For spillover-related zoning, the operative concern is the size of the spillover range (Ostrom et al. 1961, 835; cf. Ellickson 1993, 1325). In some cases, spillovers are quite localized and could be adequately addressed by within-jurisdiction zoning. To take a simple case, low-income housing that is thought to generate negative aesthetic spillovers for high-income residences could be placed on the opposite side of the jurisdiction, with parks, government buildings, or other neutral uses serving as a buffer. Of course, spillovers—even relatively localized ones—can easily cross jurisdictional boundaries; in such instances, even whole-jurisdiction zoning would be inadequate absent arrangements with the neighboring jurisdiction. If these cross-boundary spillovers are limited in scope (say, affecting only the first two blocks beyond the border), intrajurisdictional zoning could dedicate the spillover zone to a use that would not suffer from the spillover.

Public goods zoning presents a more complicated case. Here, the question depends on the scale of production and consumption of the local public goods for which consumers serve as important inputs. This is an interesting, and ultimately empirical, question. Consider the example of public schools in Jurisdiction G, for which the quality of students and characteristics of their families serve as inputs. It is true that excluding all "quality-detracting" or difficult-to-serve students from Jurisdiction G may help to enhance the educational product provided throughout Jurisdiction G. However, heightened production and consumption as a result of client inputs could occur at a micro level—say, at one high school's attendance zone within G. If this were so, then zoning *within* the jurisdiction could serve to attract and retain on public goods grounds. A homebuyer may care a bit less about the overall quality of the public school system in a given jurisdiction than she cares about the quality of the specific schools whose attendance zones contain her selected home.[9] Likewise, the overall crime levels in a city may be of less concern to a homebuyer than the safety in the area surrounding her home and in the areas that surround her

frequent paths of travel.

The local public good of place name reputation may animate exclusion at either intrajurisdictional or whole-jurisdiction levels, depending on the extent of the area with which a given place name is identified. A profusion of smaller-scale place names coupled with intrajurisdictional zoning would reduce the incentive to exclude entrants from the entire jurisdiction. For example, existing residents of the "Old Town" district would not see a threat to the cache of their place name if increased density were permitted in another area within the same jurisdiction known by a distinct place name, such as "New Frontier." Dilution of the "Old Town" name will only be avoided, however, if it is possible to enforce a common understanding of where, precisely, the boundaries of "Old Town" fall. Herein lies an explanation for the astonishing degree of vigilance with which some neighborhood residents and realtors police the use of place names by those just beyond the approved neighborhood boundaries.

Political motivations seem at first blush to imply whole-jurisdiction zoning; because every entrant becomes part of the same political apparatus, the only failsafe way to control the political apparatus is to control all entry. However, political or legal limits may make whole-jurisdiction zoning infeasible, or the greater political stability that comes with whole-jurisdiction zoning may be outweighed by the risk that litigation or legislation at the state level will ultimately generate more volatility in land use patterns. Political motives on their own would not imply any preference for a particular spatial pattern of residential housing within the jurisdiction. But intrajurisdictional zoning might be used to limit the total amount of housing stock open to people of different classes. Hence, intrajurisdictional zoning could be consistent with retaining political control among upper and upper middle classes, especially if only small areas are zoned for lower-income housing and densities are controlled carefully (cf. Downs 1976, 198–199).

Finally, monopolistic motivations would be expected to generate attempts to suppress as much potential housing competition as possible. The broader the scope of exclusion, the more potential competition will be blocked. Where it is not possible to block all new development (or is not desirable for other reasons, such as the loss of potential agglomeration benefits), the rational monopolist will attempt to allow in only housing that is not a very good substitute for her own. Intrajurisdictional zoning would provide a way to control the location and type of development.

In sum, although Tiebout-style choice is usually associated with whole-jurisdiction zoning,

zoning *within* jurisdictions can also serve as an important element in interjurisdictional choice. Municipalities can gain a competitive edge not only by altering the overall quantity of different types of housing, but also by controlling spatial arrangements of housing within the jurisdiction (Ford 1994, 1854). A jurisdiction that tries to produce a blending of income classes by eschewing internal residential zoning classifications (Vatter 2005, 7–11) will find its efforts undermined if competing jurisdictions continue to offer stratified living arrangements that prove attractive to higher-income classes. If income mixing produces societal gains, intervention into zoning prerogatives at a higher governmental level might seem to be indicated. But would even a coordinated regional response rolling back exclusionary zoning produce the desired results? Answering this question requires the consideration of covenants as an alternative form of land use control.

Zoning Versus Covenants

Covenants have long been essential to the land use patterns of the only major unzoned American city—Houston—but they are becoming an increasingly pervasive alternative mechanism of land use control nationwide as private communities continue to proliferate. Covenants operating within private communities usually regulate residential housing to a greater extent, and at a higher level of specificity, than traditional zoning. As such, they represent attempts to fine-tune the living environment within the community and to prevent negative spillovers among residents while fostering positive ones. While some private communities are larger than some municipalities, the typical scale of a private community is smaller than that of a typical municipality. Taken together, these facts suggest that covenants can substitute for fine-grained intrajurisdictional zoning designed to address localized spillovers and to enhance the quality of small-scale local public goods. Covenants work much less well as substitutes for whole-jurisdiction or larger-scale intrajurisdictional zoning, although they could achieve some of the effects associated with such zoning, if exclusionary zoning were dramatically limited.

Consider fiscal motivations for exclusion. Limiting entry into the private community to those who will pay the established share of homeowners association dues allocates the costs of the local public goods offered within the community in a manner akin to fiscal zoning. However, if residents of private communities must still pay property taxes to support local public goods provided by the jurisdiction of which their community is a part, the inability to exclude smaller

housing units from the municipality as a whole could lead to tax base slippage. But private communities may be able to work through the political system to obtain some relief from local property taxes (e.g., Rosenblum 1998, 153) or influence the funding and service levels of the municipality's local public goods. Moreover, if private communities are in a position to substitute private versions of most public goods, homeowners within these communities would likely vote to cut service levels at the municipality level (Stiglitz 1983, 46). Whether or not these tactics will be successful depends on the political power of those within private communities throughout the jurisdiction.

Political motives for exclusion seem unlikely to trigger covenants. Exclusion at the private community level would have little effect on the political balance that prevails in the jurisdiction as a whole, unless the private community makes up a large share of the jurisdiction. The development's internal political system—the homeowners association—would not be expected to generate politically motivated exclusion, for two reasons. First, the developer decides at the outset on the precise amount and type of housing and retains political control over the development long enough to see that plan built out and most of the units sold (Henderson 1985, 262–263). As a result, the homeowners association is not in a position to make decisions about the addition of new housing or different housing types.

Second, unlike municipal zoning, which can be altered politically at any time, covenants provide a way to make binding commitments regarding land use in period 1 that cannot be easily undone in period 2 (e.g., Henderson 1985). Such commitments, to the extent they are harder to undo than political commitments, valuably remove uncertainty for initial entrants and make them less vulnerable to political shifts (id.; Henderson 1980, 899–900).[10] This binding commitment to a planned pattern of development also curbs monopolistic tendencies or other exclusionary tendencies that early entrants might otherwise be tempted to exhibit (Henderson 1980, 894; cf. White, 1975).

Another important difference between covenants and zoning inheres in the public—and publicly enforceable—nature of the latter. While the rise of the private community governed by a homeowners' association has greatly simplified covenant enforcement and has eliminated the free-rider problem that would otherwise exist with regard to addressing violations, it remains the case that the costs of enforcing covenants fall on homeowners within the private community rather than on the jurisdiction at large. Of course, this allocation of costs can be altered by law.

Indeed, Texas state law provides for public enforcement of private covenants in Houston (Berry 2001).

The most important limitation on private covenants as a substitute for zoning is the fact that each household bound by a covenant regime must have consented to it, either expressly or by purchasing a home already bound by a covenant. This works easily and well in new developments; the developer simply drafts a master deed or declaration containing the applicable covenants, and every member of the community to whom she sells becomes thereby bound by the covenants. Matters are much more difficult in the case of an existing neighborhood. Without the central coordinating figure of a developer, hundreds or thousands of individual pairwise covenants would be required to reciprocally bind a community of even modest size (Epstein 1988, 914–915).

Administrative difficulties aside, holdouts would be able to inflict negative externalities on the rest of the community because they would not be bound by covenants to which they had not agreed. Moreover, the holdouts would not be required to contribute financially to local public goods and so could free-ride on any such goods that lacked cost-effective exclusion technologies. At least in the absence of a legal change that would overcome the holdout difficulty (Nelson 2005, 265–267), few existing neighborhoods are in a position to substitute covenants for zoning. This fact has important implications for zoning reform.

To illustrate, imagine that all zoning classifications that distinguished between different kinds of housing were prohibited. Because holdout problems thwart the establishment of new covenant-bound communities in existing neighborhoods, households wishing to use covenants as exclusion devices would be attracted to existing covenant-bound communities or to new developments that can readily set up covenant regimes. New developments require significant contiguous land and thus will be built predominantly in outlying areas where undeveloped land exists (Fischel 1999, 902). If existing covenant-bound communities are also predominantly located in newer portions of the metropolitan area, the stage would be set for outmigration from the older, core areas of the city.

To the extent that sprawling development patterns generate traffic and other externalities, creating pressures in the direction of outward movement from the metropolitan core would make matters worse. The resulting impacts on stratification and concentrated poverty could undo the gains from our hypothetical zoning reform. If something is to be done about exclusionary

residential patterns, the remedy should address private exclusionary devices as well as public ones. Next, we will see how a system of land use control that takes seriously the gains and losses produced by different patterns of association supports such a comprehensive approach to exclusion.

Association Matters

Opponents of exclusionary zoning often focus their attention on fiscal arguments. The fiscal motivation for jurisdictional exclusion is easy to identify, and a proposed fix that promises to remove that incentive—say, statewide funding of education—is easy to propose. Differences in the tax base or unequal spending by different jurisdictions are also easy to spot, although a closer examination reveals complications that largely defuse the force of normative arguments based on these factors (Fischel 2001, 133–135). Nonetheless, the same fiscal arguments are made over and over—perhaps because financial arguments carry the cache of hard numbers. But this approach misses the most important insight about residential choice: that association matters.

To be sure, it is unclear precisely *how much* association matters—for example, how much user production influences outcomes relative to other interventions—although the contribution appears to be substantial (see, e.g., Oates 1977, 213; Bénabou 1996). The mechanisms by which peer and neighborhood effects are produced are also opaque (Jencks and Mayer 1990, 113–115). Moreover, it is empirically unknown how much stratification might be reduced if the fiscal motivation for exclusion were entirely removed (Bogart 1993, 1679). While more study on these points is necessary, it seems likely that too much attention has been given to the fiscal side of local government and too little to the associational side. If peer and neighborhood effects are tremendously important to quality of life and to educational and safety outcomes, changes in associational patterns, not financial patterns, may be necessary.[11]

Gains from Different Grouping Patterns

The efficiency argument for paying attention to residential group formation across a metropolitan area stems from the observation that grouping may not be a zero-sum game (see, e.g., Fischel 2001, 69–70; Fennell 2001, 21 and n. 69; Ross and Yinger 1999, 2044). This is true in two respects. First, it is likely that the contributions that quality-enhancing individuals make to local public goods are not constant but rather depend on how many other quality-enhancing users

are already in the pool. Second, different sets of groupings may produce varying amounts of negative or positive externalities.

The first issue relates to the production function for local public goods (Oates 1981, 95). If local public goods had a perfectly linear production function relative to the inputs of quality-enhancing individuals, then the movement of a quality-enhancing individual from one place to another would be a wash: The gaining jurisdiction would gain exactly what the losing jurisdiction lost (Jencks and Mayer 1990, 122). However, the production function for local public goods like education or public safety may be significantly nonlinear. While the true shape of the production function is an empirical question, one possibility is an S-shaped curve like that shown in figure 6.3 (Oliver et al. 1985, 527–528, fig. 1(a); Fennell 2001, 18, fig. 1).

[Figure 6.3 about here]

The horizontal axis in figure 6.3 tracks the number of quality-enhancing users in a community, and the vertical axis tracks quality. The region marked U below the lower horizontal dashed line represents an unacceptable quality level, while the area marked A, above the top dashed line, represents an unambiguously acceptable quality level. If quality-enhancing users are distributed unequally throughout the various jurisdictions in a metropolitan area, then some of the jurisdictions will be in the area left of the vertical line marked B; others will be between B and C; and yet others will be to the right of C. It is evident that one quality-enhancing user moving from a jurisdiction that is in the range to the right of C to a jurisdiction between B and C will generate a net gain, bringing more to the community he joins than he will cost the community he leaves.

In addition to these changes, which are internal to the various gaining and losing groups, groupings of some kinds will generate spillovers that will affect quality of life in surrounding jurisdictions or communities. For example, when education or safety falls into the unacceptable region for a given community, the surrounding communities will suffer. Likewise, stellar local public goods may produce positive spillovers in the surrounding community. The magnitude of these spillovers is of course an empirical question, although it seems plausible that the negative spillovers associated with extremely inadequate local public goods would far outweigh positive spillovers associated with extremely high-quality local public goods. Hence it is possible that

moving from a tighter distribution among groups in terms of the quality of their local public goods to one that is more dispersed would yield a set of spillovers that would be on balance more costly (or less beneficial) to the surrounding community.

These efficiency considerations provide reasons, in addition to social justice rationales, for caring about the pattern of residential groupings produced in a metropolitan area. Moreover, these considerations apply with equal force regardless of whether stratified groupings are produced through zoning, covenants, or some combination of the two. To address the associational issue comprehensively, however, it is necessary to confront what has become a red herring in discussions about residential exclusion generally: the invocation of "free association."

Free and Unfree Association

Tieboutian sorting is often conflated with notions of associational freedom. Invoking Tiebout, scholars pointedly ask: Why shouldn't people be able to freely choose the kinds of communities in which they wish to live? Why must every community be internally diverse? Why, indeed, can't dozens of distinct specialized communities exist side by side in our metropolitan areas, offering a rich smorgasbord of choices to all? The answers to these questions come back to exclusion. If exclusion and its motivations are taken seriously, the flaws in the associational freedom argument become apparent.

In the case of residential housing, one must live with some set of neighbors if one is going to take advantage of the agglomeration benefits of the metropolitan area. The sorting of households into jurisdictions within a metropolitan area can be understood as the exhaustive partitioning of a set into subsets. This fact makes forced exclusion (from one or more subsets) a form of forced inclusion (in one of the remaining subsets). The popular version of the Tiebout hypothesis sidesteps this associational difficulty with the handy notion that different people want different things. Some people like art and culture, the story runs, while others want athletic fields and sports stadiums, while still others want excellent schools and libraries.

The unstated premise of this "differing tastes" model is that preferences are nonconflicting, so that everyone is happy with their grouping. This seems implausible (Frug 1998). We might suppose that many people would prefer to group up with those who are best positioned to achieve important goals, like producing high-quality education and public safety at low cost.[12] Some choosing protocol must determine who gets into the more-preferred groupings and who is

effectively relegated to some less-attractive grouping.

Residential exclusion—whether government-produced through zoning or government-sponsored through the enforcement of private covenants—establishes a protocol that privileges certain associational choices over others and determines the currency in which bids may be made for associational primacy. Whatever the efficiency-based arguments for the choosing protocols established through land use controls, it is wrong to characterize them as facilitating or vindicating "free association" across the board. It is impossible, however, to avoid setting *some* protocol for groupings that will frustrate some people's associational objectives (Wechsler 1959, 34), whether that protocol is "chase the rich" or "first in time rules the game" or "switch on the Waring blender."[13] "Free association" does not constitute a normative argument in favor of land use policies that have the purpose and effect of excluding some segment of the population from residential areas that they would otherwise choose to enter.

Toward a Theory of Associational Entitlements

Legal scholarship on land use controls has understandably focused on legal entitlements to do or not do various things with or on the land. But what goes under the head of "land use control" is in substantial part directed at controlling association (see, e.g., Mills 1979, 536). Controlling who will be one's neighbors means controlling living environments, controlling politics, and controlling the quality of local public goods for which consumers are significant inputs. To confront the reality of land use controls as they impact residential choice requires a theory of associational entitlements.

One of the unstated assumptions underlying efficient sorting into jurisdictions is that the jurisdictions are offering bundles of services and amenities that they have a right to offer. If some of the offerings are stolen from others, then the resulting competition will be unfair and the resulting allocation will not be efficient. For example, suppose that a jurisdiction attracts residents by offering an unlimited, free supply of water. It is able to supply this local public good only because it diverts water from another community, which it thereby deprives of adequate water. There is little question that this is not the sort of jurisdictional competition that will produce efficient results.

The associational interests infringed by exclusion should be analyzed similarly. Of course, the sorts of entitlements that are infringed through sorting are not as well defined as those to

water. However, if one accepts the notion of an underlying entitlement not to have costs off-loaded from (or benefits diverted to) another jurisdiction, then exclusion that produces such off-loading (or diversion) is illegitimate. At present, we lack a vocabulary for such an entitlement.

As a starting point, we might conceptualize associational possibilities within a metropolitan area as a common resource susceptible to the same sorts of dilemmas as other common pool resources. Groups form out of a background population, carrying with them various amounts of associational surplus or deficit. As privileged groups set up land use mechanisms designed to skim out as much associational surplus as possible, excluded households become more concentrated. These groups left behind may suffer associational deficits that far outweigh the cumulative benefits enjoyed by the prioritized groupings and may also emit externalities harmful to the larger community. Significantly, the logic of associational entitlements would extend beyond traditional zoning to encompass land use controls in private developments. Working out the parameters of such an entitlement will not be easy or uncontroversial. But work in that direction should begin.

Advancing the notion of an associational entitlement does not imply summarily forcing higher-income people into lower-income neighborhoods against their will. Recognizing an entitlement is only half the task—and perhaps not even the most interesting half. A legal system must then decide how that entitlement is to be protected—whether through property rules, liability rules, or perhaps even a hybrid arrangement that uses options to serve a demand-revealing function (Calabresi and Melamed 1972; Ellickson 1977; Fennell 2005). For example, the notion of compensation schemes (liability rules) to redress harm caused by land use controls (see, e.g., Ellickson 1977, 506) could provide a starting point for thinking about associational entitlements. .

Conclusion

The contributions of Tiebout's ideas to the analysis of land use controls have remained largely untapped to date. The version of the Tiebout hypothesis popularized in law schools tells a free-market or free-association story that does not capture the constraints that exclusion places on jurisdictional choice. This normative spin has alienated many of those who are most concerned about the problems of exclusion, even as it has led others to accept stratification induced by land use controls on the grounds that it is an efficient product of jurisdictional

competition.

A closer look at Tiebout's work reveals its relevance to the critical analysis of land use controls. Most significantly, Tiebout reminds us to focus on the aspects of the jurisdictional bundle that attract residents. If exclusion is the prize in the cereal box that drives jurisdictional choice, then it makes sense to look closely at how—and why—jurisdictions use exclusion competitively. Likewise, we cannot understand jurisdictional choice without examining the choice-constraining effects of such attractive exclusion. This chapter is just an initial step toward a more fully articulated discussion of the connections between the Tiebout hypothesis, exclusion, and land use policy, but I hope that it will encourage legal scholars to take a closer look at Tiebout's remarkable work—both to plumb its depths and to confront its limits.

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[1] I will focus here on the purchase of a home, as leaseholds present a somewhat different set of incentives (see, e.g., Ross and Yinger 1999, 2020).

[2] This is just one of many ways that the components of the bundled housing choice could be delineated. The bundled nature of the choice, as well as the elements in the bundle, have been well noted in the literature (e.g., Jackson 1975, 6; Rose-Ackerman 1983, 74; Pozdena 1988, 43–44, 82).

[3] If the land use control is tailored to overcome spillovers within the jurisdiction that would otherwise be generated by self-interested behavior on the part of residents, the "distortions" in consumption it induces may be viewed as desirable adjustments in incentives (e.g., Lenon, Chattopadhyay, and Heffley 1996, 222).

[4] The first problem is really a subset of the second. Once the optimum community size has been reached, further additions raise the cost of services to a point that will not be covered by the new entrant.

[5] I am grateful to Bill Fischel for a discussion that led me to consider this point. For a brief overview of some of the literature on such "political economic zoning" see Bogart (1993) at 1672.

[6] For one take on the dynamics involved, see Ross and Yinger (1999).

[7] Given capitalization, a property tax can work as a head tax as long as the housing supply is fixed; the housing need not be homogeneous (Hamilton 1976; Fischel 2001). However, if

heterogeneous housing cannot be created (or planned) in fixed quantities at the time the jurisdiction is created, political pressures may prevent the later introduction of less-expensive housing units. Even though the residents of the new, smaller housing will end up paying as much for the local public goods as the current residents (because the "bargain" associated with paying a smaller amount of property tax will be capitalized into the home's price), those left owning larger homes at the time the new housing is permitted will suffer a loss that represents a windfall for the developer of the new housing (or whoever owns the land at the time the new housing is allowed in), assuming that its introduction could not have been anticipated (Fischel 2001, 69). This potential loss represents a fiscal motivation to oppose the introduction of less-expensive housing units (Ellickson 1971, 337–338).

[8] Musgrave (1969) makes a similar point when he observes that "if benefit intensity declines in successive rings around the [service] center, so should cost assessments" (296). Where a property tax makes contributions dependent on the amount of housing consumed, intrajurisdictional zoning in concentric circles could be used to calibrate payments to benefit levels. This would achieve the result suggested by Musgrave, in which "residents of the inner ring with a given taste and income will be called upon to contribute more than similar residents in the outer ring" (296).

[9] In places where a school choice plan is in force, the homebuyer will treat the various possible schools as options that come with various commutes from the location of her selected home. In this case, the schools become part of the commuting option pack that she purchases with a given home's location.

[10] Of course, most private communities do allow changes on less than unanimous consent in order to avoid holdout problems. Nonetheless, typical supermajority requirements for major changes in land use provide greater protection than does a majoritarian political process.

[11] As discussed in Fennell (2001, 53–60, 71–73), groups and individuals can become more (or less) "quality enhancing." Hence, addressing exclusion is only one possible way to improve troubled groupings, but it may be an essential way if assembling a cooperative "critical mass" is needed to trigger community transformation (see, e.g., Schelling, 1978, 91-110; Oliver, 1985). By the same token, forcible reassignment or other effects of entering a new grouping might negatively influence someone's willingness to be a "quality-enhancing" participant (Fennell

2001, 71–73).

[12] To be sure, concerns about relative standing in the community could create pressures in the other direction (Frank 1985; Jencks and Mayer 1990, 116–117). It is also true that the pervasive existence of land use restrictions does not provide conclusive proof that conflicting preferences are being suppressed; the restrictions might be superfluous, merely reproducing what market processes would produce in any event (see Ross and Yinger 1999, 2015). But given the tremendous social harm associated with concentrated poverty, and especially its devastating effects on the life chances of young children, the assumption that the present exclusionary arrangements are what "everyone wants" does not seem convincing.

[13] Ellickson and Been (2005) refer to a land use regime that "would call for all land uses and all types of households to be represented in each neighborhood in proportion to their representation in the entire metropolitan area" as the "Waring blender model" (771).

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Figure 6.1

Choosing a Jurisdiction

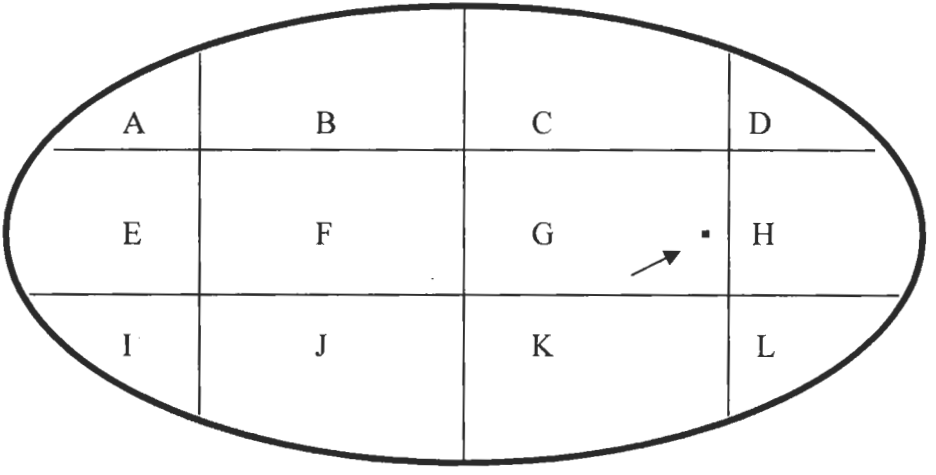

Figure 6.2

The Bundled Residential Choice

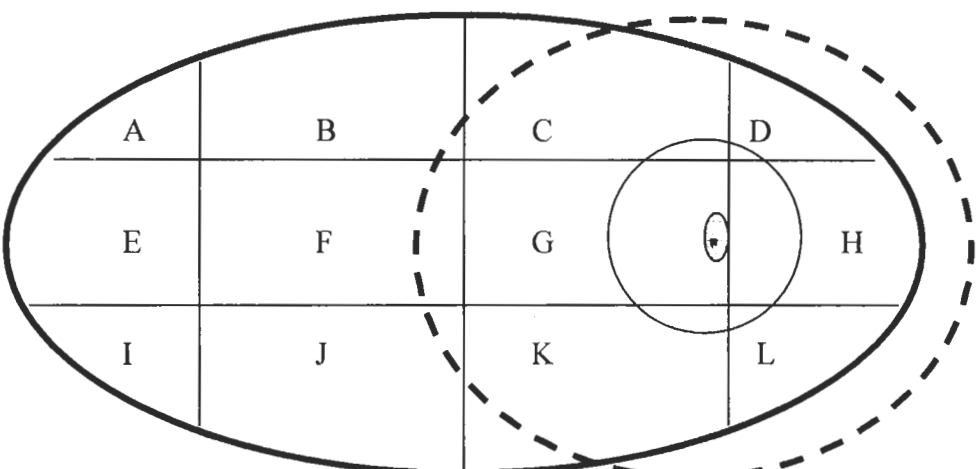
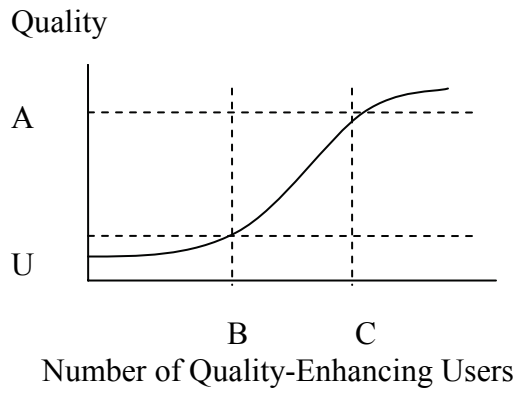
Figure 6.3: S-Shaped Production Function for a Local Public Good