Daniel B. Rodriguez^{*} and David Schleicher^{**}

INTRODUCTION

Individual location decisions are not given much respect by local governments. Governments frequently use zoning and other regulatory rules to spread development across a city, claiming that the whole city, and not just one favored or disfavored part, should get the benefits and bear the costs of new development.¹ Local governments also create incentives to encourage certain types of development to locate in certain areas—using policy tools that range from non-cumulative zoning to outright subsidies—in order to create particular mixes of industrial, commercial, and residential development.² However, the arguments in favor of these policies frequently rely upon a specious depiction of the incentives of governmental decisionmakers on the one hand and private citizens on the other.³ That is, they fail to see the wisdom behind the old saying that the three most important factors in real estate are "location, location, location."

When justifying such policies, officials and interest groups rely on an assumption, frequently unstated, that property developers, businesses, and individuals just do not care very much (or do not have the right incentives to care) about where they locate inside a given city.⁴ And this assumption is surely wrong. Instead, locational decisions are motivated by specific bene-fits citizens and firms receive when they choose to reside in one specific area rather than in another.⁵ Moreover, locational decisions are frequently "sticky"—that is, they are resistant to governmental management and are resistant for good reasons.⁶

The fact that residents do in fact care about the identity and number of their neighbors for reasons other than their potential for creating nuisances

^{*} Dean and Harold Washington Professor, Northwestern University School of Law.

^{**} Associate Professor of Law, George Mason University School of Law.

¹ See Robert C. Ellickson, Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls, 40 U. CHI. L. REV. 681, 692 (1973); Patricia E. Salkin & Amy Lavine, Community Benefits Agreements and Comprehensive Planning: Balancing Community Empowerment and the Police Power, 18 J.L. & POL'Y 157, 157-64 (2009).

² Roderick M. Hills, Jr. & David Schleicher, *The Steep Costs of Using Noncumulative Zoning to Preserve Land for Urban Manufacturing*, 77 U. CHI. L. REV. 249, 252-54 (2010).

³ See id. at 255-56.

⁴ See David Schleicher, *The City as a Law and Economic Subject*, 2010 U. ILL. L. REV. 1507, 1507-10, 1529 (2010).

⁵ *Id.* at 1509-10.

⁶ *Id.* at 1536-37.

has long been a part of the law and economics literature on zoning.⁷ However, this literature has not had a language for discussing *exactly* what types of gains residents get from their locational decisions.⁸ This absence of a systemized way of talking about these gains has led scholars to overlook their importance. While a comprehensive delineation of sound public policy awaits further work, our Article here focuses in on "the location market" in order to yield some general principles and insights to guide public decisionmaking.

By the location market, we mean the structure of incentives and opportunities that individuals and firms face when deciding whether and where to relocate. Modern work in urban economics shows that location decisions are valuable because of the "agglomeration" benefits they provide.⁹ Selecting a specific city or neighborhood gives a business or individual the benefits of reduced transportation costs for goods, market depth, and intellectual spillovers. While some agglomeration benefits work at the citywide or regional level, others are extremely localized—stores co-locate on a given block to give consumers a wide array of options, individuals live in particular neighborhoods in order to participate in specific cultural and intellectual conversations, and so on. The logic of agglomeration economics suggests that location decisions provide specific gains both to residents who cluster in order to capture these benefits and also to society on the whole, given the greater creativity and innovation enabled by such agglomeration.¹⁰

Zoning restrictions can impede the development of agglomeration benefits. A policy that, say, limits the height of buildings in a commercial downtown will not costlessly reassign development that would have occurred downtown to locate elsewhere in the city. Instead, it will impose deadweight losses by stopping firms and individuals from locating in their preferred location within a city, thereby preventing transactions between firms that would have been neighbors. Put another way, policies that limit how many people or businesses may be in a given place, or what uses land can be put to, impose something that looks much like a supply restriction on the "location market," and welfare analysis can proceed in the way that consideration of any such regime would.

However, the benefits of agglomeration are, by definition, based on externalities—they are the benefits residents get from living or working

⁷ See, e.g., Ellickson, supra note 1, at 684-85; Robert C. Ellickson, Suburban Growth Controls: An Economic and Legal Analysis, 86 YALE L.J. 385, 443 (1977); Bernard H. Siegan, Non-Zoning in Houston, 13 J.L. & ECON. 71, 89-90 (1970).

⁸ This is not to say that the literature has neglected to attend to the costs of sorting and zoning. However, the standard law and economics account looks principally at "transaction costs," in this case, the costs associated with relocation and with negotiating with individuals, firms, and government in order to reduce these costs.

⁹ See generally EDWARD L. GLAESER, CITIES, AGGLOMERATION AND SPATIAL EQUILIBRIUM 116-64 (2008); Schleicher, *supra* note 4, at 1515-29.

¹⁰ Schleicher, *supra* note 4, at 1523-28.

close to other residents.¹¹ This might lead one to believe that the location market is a hopeless failure, and legislatures should enact a vast scheme of subsidies to promote agglomeration-producing land uses. We think this is wrong as well. The existence of agglomeration externalities may well give rise to some specific types of location-market failures, particularly with regard to long-term fixed investments. But in an analogue to the way Robert Ellickson described landowners developing efficient rules for reducing nuisances without regard to the law on the books,¹² participants in urban land markets can engage in strategic behavior to provide incentives to produce an efficient amount of agglomeration externalities.¹³ For agglomeration benefits that are felt in very local ways, such negotiations likely lead to a relatively efficient location market in which private parties successfully deal with the problems of social cost.¹⁴ There are, however, some situations-particularly where location decisions are relatively fixed and agglomeration externalities are spread broadly-where this type of informal negotiated internalization cannot take place, and this Article discusses why subsidies might still be problematic in these contexts.

Individual location decisions, of course, are endogenous to governmental policy; as Charles Tiebout, Wallace Oates, and others have famously argued, mobility is influenced by what government does and does not do.¹⁵ At the same time, policy choice must rest on a realistic assessment of how individuals, taking account of the incentives and opportunities built into the system, make locational choices.¹⁶ What agglomeration economics teaches us, among other things, is that individuals place a heavy value on clustering and sorting so as to gain the enormous benefits of joining in a critical mass.¹⁷ Moreover, individuals are reasonably prescient in making such choices. Governmental policies that improve upon these decisions are possible—not all externalities are captured, after all, and individuals and firms often do not take into consideration their effects on others—but they

¹¹ GLAESER, *supra* note 9, at 116.

¹² ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 1-9 (1991) (describing how neighbors negotiate over negative externalities).

¹³ See Schleicher, supra note 4, at 1514, 1517-20.

¹⁴ See R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 2-15 (1960) (positing that if there are no transaction costs, negotiations between private parties will lead to an efficient outcome regardless of how property rights are initially allocated).

¹⁵ Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. POL. ECON. 416, 418 (1956); see also William A. Fischel, Footloose at Fifty: An Introduction to the Tiebout Anniversary Essays, in THE TIEBOUT MODEL AT FIFTY: ESSAYS IN PUBLIC ECONOMICS IN HONOR OF WALLACE OATES 1, 1-18 (William A. Fischel ed., 2006); Wallace E. Oates, The Many Faces of the Tiebout Model, in THE TIEBOUT MODEL AT FIFTY: ESSAYS IN PUBLIC ECONOMICS IN HONOR OF WALLACE OATES, supra, at 21, 22-34; Wallace E. Oates, The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis, 77 J. POL. ECON. 957, 958-59 (1969).

¹⁶ Schleicher, *supra* note 4, at 1511-13.

¹⁷ Id. at 1536-38.

are difficult to devise, given the high gains (economic, lifestyle, etc.) associated with choosing where and with whom to live and to play, and the ability of individuals to negotiate relatively effectively with one another. Public officials and urban planners discount or disregard this market at their peril.

Part I of this Article will acquaint the reader with the concept of agglomeration economies, the gains that naturally arise when residents and businesses co-locate. Part II will discuss the costs created when regulations break up agglomerations. Part III will examine why private parties' negotiations frequently permit urban residents to efficiently produce and capture these agglomeration benefits.

I. AGGLOMERATION ECONOMICS: A BRIEF REVIEW

Legal scholarship about local-government law and land use has been rather late to the game in considering the effects of agglomeration economics.¹⁸ Since roughly the 1980s, there has been a huge rise in interest in answering the basic question of why cities develop and what the process of city development might tell us about policy making at the local and national levels.¹⁹

It may seem odd to start a research agenda by asking why cities exist. After all, for as long as humans have been something other than huntergatherers, cities have always existed.²⁰ Upon closer examination, however,

¹⁸ E.g., CLAYTON P. GILLETTE, LOCAL REDISTRIBUTION AND LOCAL DEMOCRACY: INTEREST GROUPS AND THE COURTS 99-100 (2011) (discussing how agglomeration economies permit local governments to engage in redistribution by making populations sticky in the face of increased taxes); Steven J. Eagle, Public Use in the Dirigiste Tradition: Private and Public Benefit in an Era of Agglomeration, 38 FORDHAM URB. L.J. 1023, 1083 (2011) (discussing agglomeration and the case for subsidizing firm location); Clayton P. Gillette, The Conditions of Interlocal Cooperation, 21 J.L. & POL. 365, 367-69 (2005) (arguing that preserving agglomeration economies could give suburbs incentives to support city budgets); Clayton P. Gillette, Local Redistribution, Living Wage Ordinances, and Judicial Intervention, 101 Nw. U. L. REV. 1057, 1081-84 (2007) (discussing how agglomeration economies permit local governments to engage in redistribution by making populations sticky in the face of increased taxes); Hills & Schleicher, supra note 2, at 262-67 (discussing the costs and benefits of noncumulative zoning in terms of its effect on agglomeration economies); Schleicher, supra note 4, at 1535-45 (arguing that agglomeration economies reduce the efficiency of Tiebout sorting and that sorting reduces the efficiency of regional agglomeration); David Schleicher, I Would, but I Need the Eggs: Why Neither Exit Nor Voice Substantially Limits Big City Corruption, 42 LOY. U. CHI. L.J. 277, 278 (2011) (exploring how agglomeration economies explain greater degree of corruption in big-city local governments); Richard C. Schragger, Decentralization and Development, 96 VA. L. REV. 1837, 1893-96 (2010) (using agglomeration economics to argue that decentralization of political power matters little to development); Richard C. Schragger, Rethinking the Theory and Practice of Local Economic Development, 77 U. CHI. L. REV. 311, 329 (2010) (using agglomeration economics to argue that city policies will not induce economic growth at the local-government level).

¹⁹ For a discussion of this literature, see Schleicher, *supra* note 4, at 1515-29.

²⁰ Ordinarily, the story is told that cities developed as a way to market the gains from sedentary agriculture. However, Jane Jacobs has argued that this view is backwards, it being more likely that cities

cities are a difficult thing to explain, at least using ordinary microeconomic tools.²¹ Land is more expensive in cities than in rural areas, which means that firms should only want to locate in them if there is some offsetting source of productivity that makes the cost worth it.²² While some cities feature natural advantages—good ports, beautiful views, or what have you—these alone do not have large enough effects to explain why people pile into metropolitan regions.

Perhaps more surprising, urbanity is an increasing fact of life for an increasing number of people the world over. "[W]hile only ten percent of the world's population lived in cities in 1900, fifty percent do today, and seventy-five percent likely will by 2050."²³ Today, over 75 percent of "Americans live in the four percent of the country that is urban or suburban."²⁴

The answers economists and economic geographers of the 1980s and later have identified—picking up on the work of Alfred Marshall from the turn of the century²⁵ and including ideas drawn from thinkers in the interim like Jane Jacobs²⁶—is that cities exist so people and firms can capture externalities from the behavior of others. Or as Robert Lucas pithily put it, "What can people be paying Manhattan or downtown Chicago rents *for*, if not for being near other people?"²⁷

The sources of agglomeration gains come in three basic flavors.²⁸ First, locating in a city near people one does business with reduces transportation costs for goods. Paul Krugman, among others, developed models that show that if transportation costs are real but not excessively high, development tends to crowd into regions.²⁹ While the math for understanding these models can be quite complicated, the logic is straightforward enough. Firms that

developed for trading goods, and agriculture (or most advances in agriculture) followed. *See generally* JANE JACOBS, THE ECONOMY OF CITIES 3-48 (Vintage Books 1970) (1969) (setting out her thesis that if her "observations and reasoning are correct, the reverse is true: that is, rural economies, including agricultural work, are directly built upon city economies and city work").

²¹ Or, as Economist Robert Lucas put it: "If we postulate only the usual list of economic forces, cities should fly apart. . . . A city is simply a collection of factors of production—capital, people and land—and land is always far cheaper outside cities than inside." Robert E. Lucas, Jr., *On the Mechanics of Economic Development*, 22 J. MONETARY ECON. 3, 38 (1988).

²² Moreover, the cost of land is an increasing function of density, which makes the increasing urbanization of modern society even more puzzling in the abstract.

²³ Schleicher, *supra* note 4, at 1516.

²⁴ Id.

²⁵ See Alfred Marshall, Principles of Economics 271-73 (8th ed. 1925).

 $^{^{26}\,}$ See Jane Jacobs, The Death and Life of Great American Cities 19, 189-90 (3d prtg. 1993).

²⁷ Lucas, *supra* note 21, at 39.

²⁸ The literature since Marshall has employed this framework. *See* MARSHALL, *supra* note 25, at 271-74; Edward L. Glaeser, *Are Cities Dying?*, 12 J. ECON. PERSP. 139, 140 (1998).

²⁹ MASAHISA FUJITA ET AL., THE SPATIAL ECONOMY: CITIES, REGIONS, AND INTERNATIONAL TRADE 1-6, 68 (1999).

supply each other with products follow one another into regions to avoid paying shipping costs on intermediate goods. If all the firms are in the same place, they only have to pay shipping costs when they sell the final good to consumers in another region.³⁰ Once automobiles began being produced in Detroit, for example, car-parts manufacturers located there so they did not have to ship their products too far to the auto factories, and then other manufacturers located near them, and so on. This behavior produces strong path dependencies, as sets of firms in a city create a draw for newly emerging firms to locate near them. The desire of input-producing firms to locate near-final goods suppliers can explain the development of most large American cities.³¹ But as shipping costs have steadily fallen in recent years, the importance of agglomeration based on transportation cost for goods has waned.³²

The second major source of agglomeration gains are market-size effects.³³ Participating in a big labor market, for instance, provides individuals and firms with gains from specialization, sorting and insurance. Compare an actor in Los Angeles to one in Salt Lake City. The actor in L.A. can specialize and become the best at something very specific (say, portraying zombies), while the Utahan must be able to play any role that comes his way (be it Hamlet or zombies). The L.A.-based actor can find work with a company or film that fits his skills; the Utahan must take work with whatever theater company is around. The L.A.-based actor's success is less tied to the fate of any one company—if his employer goes bust, there are others around, while the collapse of a theater company in Utah for whatever reason would mean that the Utahan has to move to keep working.³⁴

³⁰ PAUL KRUGMAN, DEVELOPMENT, GEOGRAPHY, AND ECONOMIC THEORY 90-91 (1995). What makes the math difficult is that stories involving "forward and backward linkages," as they are called in the literature, are fundamentally unstable, having multiple equilibria for any given set of inputs (like the level of transport costs and number of firms). Decisions made yesterday by firms about where to locate, and not just the inputs, affect the cost structure for a firm deciding where to locate today. This is quite hard to model. *See id.* at 79-85.

³¹ See Edward L. Glaeser & Janet E. Kohlhase, *Cities, Regions and the Decline of Transport Costs*, 83 PAPERS REGIONAL SCI. 197, 198 (2004); *cf.* Edward L. Glaeser & Giacomo A. M. Ponzetto, *Did the Death of Distance Hurt Detroit and Help New York?*, *in* AGGLOMERATION ECONOMICS 303, 305 (Edward L. Glaeser ed., 2010).

³² Glaeser & Ponzetto, *supra* note 31, at 305.

³³ For a nice discussion of this, see Glaeser, *supra* note 28, at 146-47.

³⁴ We do not mean to demean the Salt Lake City film and theater scene. Many notable movies have been filmed in Utah, including titles ranging in quality from *Butch Cassidy and the Sundance Kid* to *High School Musical. About Us*, UTAH FILM COMMISSION, http://film.utah.gov/ (follow "About Us") (last visited Feb. 27, 2012). Additionally, Utah has a substantial tax rebate for film production. *Incentives*, UTAH FILM COMMISSION, http://film.utah.gov/ (follow "Incentives") (last visited Feb. 27, 2012). But the point holds: the market for actors is deeper in L.A. than just about anywhere else, and this provides substantial benefits to actors in L.A.

THE LOCATION MARKET

Market-size effects don't only happen in labor markets. Retail markets are frequent sources of agglomeration gains.³⁵ Deep retail markets provide consumers with greater specialization, make matches between consumers and stores easier, and provide insurance that if you can't find or don't like a store, there's another one nearby. The strength of these effects can produce amazing results. For instance, on the block of 47th Street in New York City between 5th Avenue and 6th Avenue, you can find 2,600 different firms in the diamond business.³⁶ It is noteworthy, and important for this paper, that these effects can be extremely local. Diamond consumers would not get the same benefits if the retail outlets were spread throughout the city.

Market-size effects even matter a great deal for noneconomic "markets." Consider the dating market.³⁷ Young singles flock to big cities at least in part because they are, er, fertile dating markets. People can specialize, they can sort easily among many potential dates, and they have insurance that they will have opportunities for future dates following any breakup. The rise in "assortive mating" has made the dating scenes cities provide even more central to explaining youth migration to cities.³⁸

The final category of agglomeration effects is information spillovers, or the things people learn from other people who are nearby. We have a great deal of evidence that such spillovers occur, but we know less about exactly how they occur.³⁹ Wages in cities are roughly 30 percent higher than they are outside of cities, and research suggests that this is largely a result of the fact that wage growth is higher in cities.⁴⁰ People who come to cities from rural areas don't immediately get higher salaries, but their salaries increase at a higher rate than they would have outside the city, and people who leave cities generally keep their higher salaries.⁴¹ This suggests that being amid the higher density of people in urban areas results in quicker accumulation of human capital—you learn from others and the more people you interact with the more you can learn. Along the same lines, patents cite patents issued to other inventors in the same region at far higher rates than would be expected based on patent type,⁴² and cities develop jobs

³⁵ See Edward L. Glaeser et al., Consumer City, 1 J. ECON. GEOGRAPHY 27, 32-33 (2001) (discussing consumer gains from market depth).

³⁶ Lauren Weber, *The Diamond Game, Shedding Its Mystery*, N.Y. TIMES, Apr. 8, 2001, at BU1.

³⁷ See Schleicher, supra note 4, at 1522.

³⁸ Cf. Gary S. Becker, A Theory of Marriage: Part I, 81 J. POL. ECON. 813, 827-31 (1973).

³⁹ In 2000, Edward Glaeser wrote an article arguing that the future of urban research was the study of nonmarket social interactions. Edward L. Glaeser, *The Future of Urban Research: Nonmarket Interactions, in* BROOKINGS-WHARTON PAPERS ON URBAN AFFAIRS 2000, at 101, 116-21 (William G. Gale & Janet Rothenberg Pack eds., 2000). Unfortunately, we have not come very far since then.

⁴⁰ See Edward L. Glaeser & David C. Maré, *Cities and Skills*, 19 J. LAB. ECON. 316, 316-17 (2001) (finding urban wage premium a function of faster increases in wages among urban residents).

⁴¹ *Id.* at 319.

⁴² See Adam B. Jaffe et al., Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations, 108 Q.J. ECON. 577, 589 (1993).

in new types of work far more quickly than in other areas.⁴³ Ideas are created not only by solitary geniuses, but also by rich interactions between people on the same block.⁴⁴ And cities with lots of people with high human capital tend not only to be richer, but also to grow more quickly than other cities do.⁴⁵

Firms in the same industry learn from one another as well.⁴⁶ Or, as Alfred Marshall famously said:

The mysteries of the trade become no mysteries; but are as it were in the air \ldots . Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas.⁴⁷

Much is at stake with information spillovers. Many modern theories of endogenous economic growth—particularly the work of Robert Lucas and Paul Romer—rely centrally on spillovers in ideas among co-locators.⁴⁸ While there is much evidence that such spillovers occur, much remains that is that is mysterious about how and why individuals learn from others. For instance, there are debates about whether big firms or small firms produce more information spillovers, or whether such spillovers are captured in more effective ways in cities with few industries or with many.⁴⁹ Exactly

⁴⁵ See generally Edward L. Glaeser & Albert Saiz, *The Rise of the Skilled City, in* BROOKINGS-WHARTON PAPERS ON URBAN AFFAIRS 2004, at 47, 47-94 (William G. Gale & Janet Rothenberg Pack eds., 2004).

⁴⁷ MARSHALL, *supra* note 25, at 271.

⁴³ Jeffrey Lin, *Technological Adaption, Cities, and New Work*, 93 REV. ECON. & STAT. 554, 555 (2011).

⁴⁴ Medical researchers have shown that the physical proximity of authors correlates with the quality of co-written work, with papers written by people on the same faculty or the same city being cited at a higher rate than papers written by physically distant co-authors. *See* Kyungjoon Lee et al., *Does Collocation Inform the Impact of Collaboration?*, PLOS ONE, Dec. 2010, at 1, 1-2, *available at* http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0014279 (follow "PDF" hyperlink).

⁴⁶ Schleicher, *supra* note 4, at 1523. For some recent evidence out of Germany, see David B. Audretsch & Dirk Dohse, *Location: A Neglected Determinant of Firm Growth*, 143 REV. WORLD ECON. 79, 87-94 (2007) (finding firms located near each other in German planning regions experience higher growth rates when controlled for other variables).

⁴⁸ See Schleicher, supra note 4, at 1524-28 (summarizing the work of Robert Lucas and Paul Romer).

⁴⁹ Following the arguments in Jane Jacobs's famous discussion of the differences between Manchester and Birmingham in England, the current majority opinion is that cities containing many small firms doing different things will grow more quickly, but there are substantial dissenters from this position. *See* JACOBS, *supra* note 20, at 82-95; Mario Forni & Sergio Paba, *Spillovers and the Growth of Local Industries*, 50 J. INDUS. ECON. 151, 161-63 (2002) (finding both intra- and inter-industry spillover effects); Edward L. Glaeser et al., *Growth in Cities*, 100 J. POL. ECON. 1126, 1129 (1992) (finding evidence that cities with more diversity in industrial type and more small firms have more effective

how we learn from others who are nearby is a bit of a lacuna in the research—it is hard to capture the phenomenon with something anything other than anecdotes.

How do the findings of agglomeration economists relate to zoning decisions? There are two ways. The first is at the macro level. Zoning decisions in individual cities can, when added up across a region, can cause the cost of housing and office space to increase. According to the careful work of Joseph Gyourko, Raven Saks, and Edward Glaeser, this is exactly what has seemed to happen in many regions of the United States, particularly in several rich regions on the East and West Coasts.⁵⁰ In the most heavily regulated regions, the cost of housing is double the cost of producing housing, strongly suggesting that supply restrictions are sharply limiting the production of housing.⁵¹ The high prices for housing we see in regions like New York, San Francisco, and Boston are a result of an increase in demand given a relatively fixed supply of housing.⁵² The inflows of population with little increase in price in regions like Houston and Atlanta are reflective of increased demand with a flexibly sized housing market.⁵³

This phenomenon has major effects on where people live and on the broader macroeconomy. When zoning has an effect on the overall cost of housing in a region, it distorts labor markets and agglomeration economies. For example, employers in high-cost cities like New York cannot easily add jobs, given the high cost of housing within and near the cities. As Ryan Avent argues, the fastest-growing and highest-paying industries in the United States are overrepresented in heavily zoned regions.⁵⁴ However, contrary to ordinary expectations, population and employment have not increased much in these areas and industries. Instead, increased housing costs have meant that the growing industries in these regions have not expanded hiring much the last ten years, while lower-wage, slower-growth industries in lower-cost cities have expanded.⁵⁵ Thus, Avent shows, land use restrictions have fundamentally changed the mix of employment in the United States. In one startling fact, Silicon Valley *lost* population during the dot-com boom in the late 1990s, as supply restrictions meant that housing costs in-

spillovers). This position has a substantial number of dissenters. *E.g.*, J. Vernon Henderson, *Marshall's Scale Economies*, 53 J. URB. ECON. 1, 21-24 (2002) (finding intra-industry spillover effects but not the inter-industry effects predicted by Jacobs).

⁵⁰ Edward L. Glaeser et al., *Why Have Housing Prices Gone Up?* 5, 7 (Harvard Inst. Econ. Research, Discussion Paper No. 2061, 2005), *available at* http://ssrn.com/abstract=658324.

⁵¹ Edward L. Glaeser et al., *Why Is Manhattan So Expensive? Regulation and the Rise in Housing Prices*, 48 J.L. & ECON. 331, 331-35, 350-51, 366-67 (2005).

⁵² *Id.* at 331-33.

⁵³ *Id.* at 358-59.

⁵⁴ RYAN AVENT, THE GATED CITY, ch. 5, loc. 883-968 (Kindle Single available only on Amazon.com) (viewed on Kindle Reading Device).

⁵⁵ *Id.* at loc. 900.

creased more quickly than wages did.⁵⁶ This is a net loss for the U.S. economy both in terms of allocative efficiency and growth. Firms that want to add labor cannot do so without moving, thereby foregoing agglomeration economies. And some of the areas with the most human capital spillovers are effectively closing their doors to residents, meaning that we will see lower rates of human capital accumulation across the population.

To be sure, the Silicon Valley story raises important questions about the social impact of this human-capital diaspora from expensive cities. Is the move of individuals and firms from high-human-capital, high-zoning regions to comparatively low-human-capital areas a national problem worth scrutiny and policy redress? Where you stand, as the saying goes, depends upon where you sit. What agglomeration economics teaches us is that there are, indeed, significant economic consequences of these zoning decisions. However, the question of whether and to what extent these consequences are problematic requires a nuanced, multifaceted analysis that (although we surely have our own thoughts on this matter) is largely beyond the scope of this Article. We focus our attention here on a critical gap in the literature: the myriad ways in which zoning can affect agglomeration economies by displacing individual location decisions inside a city.

Scholars critical of zoning policy frequently point out that by definition, zoning separates uses that would otherwise locate near one another and that such segregation is costly.⁵⁷ Ellickson called these "micromisallocations" of development.⁵⁸ However, scholars have not been particularly specific about *what* is lost when development is moved around, or rather exactly what separate users of real property get from being close to one another. Thirty years ago, Ellickson noted that our knowledge of the benefits of colocation was "still fragmentary."⁵⁹

But now we know more. Agglomeration economics gives us an answer (if perhaps a partial one) about what is lost when government policies change individual location decisions by firms and people. Moving development around within a city can lower the benefits agglomeration provides—that is, it can raise transport costs, reduce the advantages market size yield, and interrupt the flow of information spillovers. Calculating the costs of any given zoning change will have to wait for another day, but this project is aimed at providing us with a vocabulary for talking about what form the costs take.

This problem is not limited to zoning policy, per se. For instance, one of us has written about the effects of agglomeration of local-government law generally.⁶⁰ Encouraging the creation of a lot of local governments

⁵⁶ *Id.* at loc. 823.

⁵⁷ Ellickson calls these "prevention costs." Ellickson, *supra* note 1, at 694-97.

⁵⁸ Ellickson, *supra* note 7, at 409 (internal quotation marks omitted).

⁵⁹ *Id.* at 443.

⁶⁰ Schleicher, *supra* note 4, at 1535-45.

within a metropolitan area, each with the power to provide public services, can produce benefits from Tiebout-style sorting, as individuals move to get their preferred combination of public services.⁶¹ But the gains from such sorting are offset a reduction in the efficiency of the location market. If you can only get into the excellent schools in Scarsdale by living in Scarsdale, then you have an incentive to move there from wherever you would have most wanted to be absent the conditioning of government services based on residence. If location is economically important, then sorting gains are offset by agglomeration losses.

Some types of agglomeration gains happen at the regional level and, hence, are not likely to be influenced by these types of concerns.⁶² For instance, most labor markets are regional, as individuals can commute to and from their place of work. To the extent that zoning decisions don't raise the cost of housing across the region, but merely move things around, the benefits of labor-market depth will not be influenced by what parts of a region are built up. It's similarly unlikely that zoning decisions will have too big an influence on shipping costs for goods.

Other types of agglomeration—call them microagglomerations— are likely to work quite differently. Shops locate together for a reason, and breaking up a row of businesses that benefit from proximity to each other is costly. People talk to other people who are nearby at much higher rates than they do people who are farther away. Splitting friends apart is costly. How zoning policies do this is the subject of the next Part.

II. THE CASE AGAINST SHIFTING DEVELOPMENT: ECONOMIC COSTS AND POLITICAL TEMPTATIONS

The basic concept of Euclidean zoning⁶³ is that a local government is well-placed to determine the best locations for certain activities.⁶⁴ Over the years, numerous justifications for this have been offered: the reduction of nuisances, the collective ability of property owners to negotiate with developers to reduce negative effects on property values; preserving neighborhood "character"; and the ability to plan the location of local services, among others.⁶⁵ Whatever the merits of these arguments, they are frequently

⁶¹ See Tiebout, supra note 15, at 424; see also Schleicher, supra note 4, at 1529-32.

⁶² Labor markets can be influenced by the cumulative effect of zoning policies across a region. See supra discussion pp. 645-46.

⁶³ See discussion infra Part III.

⁶⁴ See RICHARD F. BABCOCK, THE ZONING GAME: MUNICIPAL PRACTICES AND POLICIES 115-25 (1966) (describing the two basic justifications for zoning as "property value" and "planning" (internal quotation marks omitted)).

⁶⁵ See id.; ROBERT C. ELLICKSON & VICKI L. BEEN, LAND USE CONTROLS: CASES AND MATERIALS 74-119 (3d ed. 2005).

offered not as one side of an equation, but rather as the complete justification for using zoning tools to relocate certain uses of property.

Further, local governments frequently justify their zoning policies on the grounds that they serve to redistribute development around a city, redirecting development from where it would naturally flow within the city and toward less-developed areas.⁶⁶ Other land use policies aim at achieving particular mixes of uses in specific areas or across areas.⁶⁷ While scholars have recognized that these policies impose costs by distorting how land is used,⁶⁸ there is no real common language for discussing what form those costs take. This Section will argue that agglomeration economics can explain the cost side of moving development around.

Because this conference is taking place in Washington, D.C., we give two examples of local zoning policy that follow this form and track them through the argument (we do not mean to pick on D.C.—we could have written the same type of thing about many cities):

* Washington, D.C.'s notorious, congressionally imposed height limit strictly caps buildings' height based on the width of nearby roads. The height limit ensures that no skyscrapers are constructed, resulting in one of the most expensive office⁶⁹ and housing⁷⁰ markets in the country. Supporters of the height limit argue that a central benefit is that it pushes new development away from the downtown core and into less-developed areas of town.⁷¹ As the director of the National Capital Planning Commission argued, "There's ample opportunity to spread out, and that does not mean going up."⁷²

* Until very recently, local laws limited the number of restaurants and bars in the popular U Street Corridor area in northwest Washington, D.C. requiring that such establishments make up no more than 25 percent of the

⁶⁶ See, e.g., ELLICKSON & BEEN, *supra* note 65, at 118; Missy Frederick, *D.C. Halts New Permits* on 14th Street NW, WASH. BUS. J. (Apr. 8, 2010, 11:04 AM), http://www.bizjournals.com/washington/ stories/2010/04/05/daily46.html (describing 25 percent limit to the number of restaurants in a particular area of the District of Columbia); *Summary of Overlay Districts*, D.C. OFF. ZONING, http://dcoz.dc.gov/ info/overlay.shtm (last updated Nov. 5, 2010) (describing a change in the law so that restaurants and bars can now form 50 percent of the establishments in a particular area of the District of Columbia).

⁶⁷ See ELLICKSON & BEEN, supra note 65, at 76.

⁶⁸ See, e.g., Siegan, *supra* note 7, at 143.

⁶⁹ D.C. is the second-most expensive office area in the United States, behind mid-town Manhattan. U.S. Office Rents a Bargain in World Comparison, CHI. TRIB., Aug. 16, 2005, § 3, at 4.

⁷⁰ Press Release, S & P Indices, The Fourth Quarter Starts with Broad-Based Declines in Home Prices According to the S&P/Case-Shiller Home Price Indices (Dec. 27, 2011), *available at* http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusacashpidff--p-us---- (follow title hyperlink under heading "Index Announcements").

⁷¹ Paul Schwartzman, *High-Level Debate on Future of D.C.: With Land in Short Supply, Scholar Says Taller Buildings Should Be Permitted*, WASH. POST, May 2, 2007, at B1.

⁷² *Id.* at B2 (internal quotation marks omitted).

total amount of retail in the area.⁷³ (In 2010, the Planning Commission upped the allowable amount to 50 percent.⁷⁴)

What advocates of these policies seem to ignore is that people and businesses have specific reasons for moving to specific places. Using zoning regulations to move development from the places it would ordinarily go reduces the benefits residents get from choosing their location. If a developer wants to build a building downtown, a building in a residential area is not a perfect substitute. Instead, the developer will lose out on tenants who want to have their offices near specific other companies or who want to put their new retail shops in front of a downtown audience.

To be a bit more formal, each of these Washington, D.C. policies reduces the degree to which agglomeration externalities will be captured. Take the limit on how many bars and restaurants can locate on a street. This policy is designed to create a mix of different types of retail uses in the neighborhood and to spread restaurants out around town. The limit aims to ensure that no one group of residents has to deal with too many of the nuisances associated with restaurants and bars like foot traffic, smokers loitering outside, and drunk twenty-somethings. This is a perfectly reasonable goal, but accomplishing it imposes costs. Users of property often do not want to be spread around town—they want to have the benefits of local market depth.

For instance, the corner of 14th and U Street NW in Washington, D.C. (in the "U Street Corridor") hosts the following establishments: a high-end speakeasy-style cocktail bar; a restaurant devoted to the cultural mix created by Marvin Gaye's brief stint in Belgium; a night-club/steakhouse that is "designed to evoke an underground Victorian atmosphere"; a Jamaican-influenced dance-hall and patty carryout; a hole-in-the-wall cheesesteak place; a jazz club; a McDonald's; an organic Neapolitan pizzeria named after a famous cyclist; a Thai noodles restaurant; an Asian-and-Caribbean-fusion "soul lounge"; and a giant coffee house that seeks to inspire "social change."⁷⁵ This is not an accident.

⁷³ Frederick, *supra* note 66 (describing 25 percent limit).

⁷⁴ Summary of Overlay Districts, supra note 66; see also Lydia DePillis, After Small Bump, ARTS Overlay Amendment Looks Set for Smooth Ride Through Zoning Commission, WASH. CITY PAPER HOUS. COMPLEX BLOG (June 11, 2010, 8:02 AM), http://www.washingtoncitypaper.com/blogs/ housingcomplex/2010/06/11/after-small-bump-arts-overlay-amendment-looks-set-for-smooth-sailingthrough-zoning-commission/ (describing pending decision to move limit to 50 percent in "Arts Overlay District").

⁷⁵ *About*, TWINS JAZZ, http://www.twinsjazz.com/index.php?option=com_content&view =article&id=2&Itemid=7 (last visited Feb. 22, 2012); *About Us*, BUSBOYS & POETS REST., http://www.busboysandpoets.com/about.php (last visited Feb. 18, 2012); *Details*, JIN ASIAN CARIBBEAN SOUL LOUNGE, http://www.jindc.com/location.htm (last visited Jan. 2, 2012); *Hours & Location*, DC NOODLES, http://www.dcnoodles.com/pages/location.html (last visited Feb. 22, 2012); COPPI'S ORGANIC REST., http://www.coppisorganic.com (last visited Feb. 22, 2012); GIBSON,

Having so many different restaurants and bars close together provides the benefits of market depth. If there were not so many restaurants nearby, none of these institutions could specialize as wildly. The customer base would be smaller, and as a result, providers would have to meet some common denominator in tastes. This can be true at the citywide level, as Avent showed cleverly through his examination of the reasons Vietnamese food is better and more available in bigger rather than smaller cities.⁷⁶ But it can also be true at the hyperlocal level. The people who live near the U Street Corridor or who frequent the area as visitors gain from having so many choices close together. After all, at least one of those places will meet each person in a group's divergent tastes without the group having to travel or split up. The more restaurants there are, the more different types of restaurants there can be, allowing for a greater fit between consumer preferences and kinds of food. And the more different types of restaurants, the better each one is likely to be, as it allows for each store to specialize in one type of food.77

Similarly, having local-market depth provides customers with "insurance" that if one restaurant is full, they can just walk down the street and go to another place without getting in a cab. Evening revelers like hopping from bar to bar based on whether they like the music or the crowd, and knowing that there are lots of options nearby makes it attractive to just show up on a block and see what happens. Notably, both of these effects require depth in markets to be extremely local. Having one or two restaurants per block does not provide the same benefits.

Having lots of restaurants and bars in one area also spurs information spillovers. It's hard to imagine "fusion" cuisines developing unless different types of chefs work near one another. Chefs frequently talk about the benefits of learning from one another, developing dishes based on other cuisines or techniques, or talking over late-night meals.⁷⁸ As we have already not-

http://www.thegibsondc.com (last visited Feb. 22, 2012); JJ'S CHEESESTEAKS, http://jjscheesesteaksdc.com/ (last visited Feb. 22, 2012); LOST SOC'Y, http://www.lostsociety-dc.com (last visited Feb. 22, 2012); MARVIN, http://www.marvindc.com (last visited Feb. 22, 2012); MCDONALD'S, http://www.mcdonalds.com/us/en/home.html (last visited Feb. 22, 2012); PATTY BOOM BOOM, http://www.pattyboomboomdc.com/home.html (last visited Feb. 22, 2012).

⁷⁶ AVENT, *supra* note 54, ch. 3, loc. 471-514 (viewed on Kindle Reading Device).

⁷⁷ Anyone who has ever had to dine in a place that offers both Chinese food and sushi knows this intimately. A jack of all cuisines is the master of none.

⁷⁸ For the best description of this type of conversation, see ANTHONY BOURDAIN, MEDIUM RAW: A BLOODY VALENTINE TO THE WORLD OF FOOD AND THE PEOPLE WHO COOK xi-xviii (2010). Or consider the (ridiculously delicious) trend started by the Kogi food truck in Los Angeles marrying Korean barbeque and tacos, which can now be found in food trucks across the country. Roy Choi, the chef at the Kogi truck, told the *New York Times* that he wanted "to bring his ethnic background together with the sensibility and geography of Los Angeles, where Koreatown abuts Latino-dominated neighborhoods in midcity and where food cultures have long merged." Jennifer Steinhauer, *For a New Generation, Kimchi Goes With Tacos*, N.Y. TIMES, Feb. 25, 2009, at D1, *available at* http://www.nytimes.com/2009/02/25/dining/25taco.html?pagewanted=all; *see also* John T. Edge, *The*

ed,⁷⁹ exactly how this works is a bit mysterious, but to the extent we use regulation to spread restaurants out, we make the communications that are certainly necessary for it to occur less likely.

Washington, D.C.'s height limit shows the costs of moving development around on a bigger scale. Advocates claim that limiting the height of buildings in the D.C. core office market (like the K Street Corridor) and in its hottest residential areas (e.g., Dupont Circle and Georgetown) will create incentives for developers to build in less-developed areas. This is true, to a degree. By limiting supply, the height limit drives up the cost of housing and office space in desirable areas, and as a result, some firms and residents do move elsewhere in the city.

This redistribution is costly, however. An office in residential Cleveland Park does not provide a law firm, small investment firm, or lobbying shop with the same benefits that an office on K Street can provide. Firms locate on K Street because it puts them close to their clients, who don't want to travel far to find their service providers, and because it puts them close to each other. Further, it is easier to recruit talent when a firm has well-placed offices. After all, talented employees like being near similarly talented people. Lawyers in K Street offices can learn from one another, can find out about new opportunities, and have the simple advantage of having people with whom to go to lunch. All of these benefits disappear when an office is located nowhere near any of its peers.

Notably, the spillovers from that accrue when, say, a firm or organization decides to locate somewhere—the information spillovers and the market depth it creates in specific types of markets—are better captured by some audiences than others. A lobbyist talking to another lobbyist about congressional procedure is producing information spillovers that will improve the listener's productivity at work. A lobbyist talking about congressional procedure to just about anyone else is a bore. Similarly, if you planted either of the authors of this piece in an information-spillover-rich, techemployee-laden Silicon Valley coffee shop or bar, we would have no idea what was happening and therefore would get no benefit. But put us in a research university (or at a good AALS panel⁸⁰) and ideas would emerge. Unless a large number of similar (or usefully different) firms can locate near one another, information spillovers from firms and workers will not be captured. And the height limit makes it less likely that there will be enough office space in the right places.

Tortilla Takes a Road Trip to Korea, N.Y. TIMES, July 28, 2010, at D1, *available at* http://www.nytimes.com/2010/07/28/dining/28united.html?pagewanted=all (telling the story of a restaurant owner who chose opening a Korean-Latin American fusion restaurant over a traditional Korean barbecue).

⁷⁹ See supra pp. 643-45.

⁸⁰ By the way, thanks to Carol Brown and Steve Eagle for putting this excellent panel together.

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The price per square foot of downtown office space reveals the value firms place on locating downtown. If other neighborhoods in the city provided locational benefits that were a close substitute, the height limit would not drive downtown prices up all that much. After all, no firm would be willing to pay a big premium for downtown office space if the location did not provide a benefit over and above the value of office space elsewhere. But in D.C., at least, it is clear that firms do not view space in undeveloped areas as a real substitute for space downtown. As demand to locate in D.C. rose in the 1990s, the price of office space downtown went up substantially.⁸¹ Office space in downtown D.C. is now nearly as expensive as space in downtown New York City,⁸² even though D.C. is much smaller than New York and does not have the same type of super-rich financial institutions.

One can tell the same story about residents. Dupont Circle, for instance, provides residents with a wealth of local restaurants and nightlife and, crucially, provides them quick access to one another. People want to live near specific other people to get market-depth advantages in consumption markets that are relevant to them (markets that range from types of ethnic food to boutique shopping). They also want to learn from one another. Coffee houses in Dupont or Capitol Hill hum with political buzz and legal chatter, the sound of political and legal professionals gathering information spillovers.⁸³ Dupont Circle residents must value the dense and diverse selection of businesses in their neighborhood, or else they would not pay the high rents in the neighborhood.

People also want to live near other people in *relevant* social markets. The existence of other dense neighborhoods does not necessarily mean that those places are equally good for certain classes of residents or that capping heights and increasing rents does not harm these classes. For instance, Dupont Circle is well known as a center of LGBT life in D.C.⁸⁴ Dupont provides LGBT residents with the benefits of market depth: a wide variety of options for dating, allowing for specialization in tastes and easier matching. In a less concentrated neighborhood, LGBT residents either have to

⁸¹ The District of Columbia's Competitive Position in the Regional Office Market, DOWNTOWN D.C. BUS. IMPROVEMENT DISTRICT 2 tbl. (Jan. 2008), www.downtowndc.org/_files/docs/leadership officemarket.pdf.

⁸² State of Downtown 2010, DOWNTOWN D.C. BUS. IMPROVEMENT DIST. 23 (2010), http://www.downtowndc.org/_files/docs/sod_2010.pdf.

⁸³ This is, we admit, a pretty unromantic way of describing urban social life. So be it. Further, for those in the green-eyeshade crowd, the line between economically important spillovers and rank gossip may seem tenuous. But gossip is an important way people develop human capital. For a political professional, learning the ins and outs of how Congress works is a form of productivity. The same is true in other geographic and intellectual areas. When two Silicon Valley engineers gossip about what new features some piece of software is going to have, they are probably sparking ideas about how they could improve their own products or launch new businesses.

⁸⁴ Gay DC Walking Tours: Dupont Circle, RAINBOW HIST. PROJECT, http://www.rainbowhistory.org/Dupont-web.pdf (last visited Feb. 22, 2012).

travel or to settle for a less diverse dating pool. To the extent that Dupont could support taller apartment buildings, it would allow more people to live there at a lower cost, which would be good for those new residents, and it would expand the available agglomeration economies for existing residents.

Further, it is not at all clear that the movement that the height limit generates results in new building elsewhere in D.C. The huge office towers in Rosslyn, just across the river in Virginia, show that limits on office heights can push development beyond political borders.⁸⁵ Similarly, a young single person who can't afford a place in Dupont or somewhere similar but wants to live in the center of a city may choose instead to move to Chicago or New York instead of, say, moving to Friendship Heights.⁸⁶

None of this is to say that it does not make sense to use zoning to bar certain land uses from specific areas. All the ordinary reasons for doing so—nuisances, the need to provide differential public services to different types of residents, etc.—still apply. But local governments should consider the costs of moving development around as well as its benefits.

The costs of moving development around in a city end up looking much like any other supply restriction. A public policy that artificially limits the number of people, offices, or types of stores that can locate in one place has two effects. First, it raises the price of locating there for everyone who stays, although how much it does so depends on the shape of the demand curve to locate in that place and the availability of substitutes.

Second, such a policy ensures that certain transactions never take place. The welfare analysis for a zoning law is effectively the same as it would be for any other supply restriction. The only difference is what is being restricted.⁸⁷ When a government tells individuals to move, it reduces the interactions people have—these are supply restrictions on urban social life.

Like any supply restriction, instead of directly raising money for the government the way taxes do, restricting development in certain areas produces windfall gains for suppliers,⁸⁸ in this case the owners of developed or still-developable land. A policy that taxes buildings based on their height would raise money that could be used to pay for municipal services like

⁸⁵ See Schwartzman, supra note 71, at B2 (describing the success of Rosslyn, Virginia, as a result of the height limit). A developer is currently building the tallest building in the region in Rosslyn. Jonathan O'Connell, *The Rosslyn Tower Set to Rise Soon*, WASH. POST, Sept. 30, 2010, at B4, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/09/29/AR2010092907525.html.

⁸⁶ Friendship Heights is a lovely neighborhood on the fringe of Washington, D.C., but is far from the Dupont Circle, Georgetown, and Capitol Hill neighborhoods.

⁸⁷ The size of the deadweight loss is equal to the number of transactions that do not take place in a particular location times the value of those transactions, minus the increased value from transactions created elsewhere.

⁸⁸ See Edward L. Glaeser, *The Economic Impact of Restricting Housing Supply*, POL'Y BRIEFS (Rappaport Inst. for Greater Bos., Kennedy Sch. of Gov't, Harvard Univ., May 2006), at 5-7, *available at* http://americandreamcoalition.org/housing/housing_final.pdf.

schools or police. Using supply restrictions to produce a similar reduction in building heights transfers that money to property holders.⁸⁹ The costs are primarily borne by renters and future buyers of land. As a result, zoning restrictions yield redistribution, but of a funny sort: taking from those who do not own real property to give to those who do.

Beyond these severe economic consequences lie serious political temptations on the part of governmental entities that are involved, or likely to become involved, in development-redistribution decisions. To put the matter simply, politicians will be tempted to reward their friends and punish their enemies and, in that ongoing song and dance, capture rents for their own purposes. Tiebout taught us famously that such sinister moves would be checked by the incentive and easy ability for individuals and firms to move around.⁹⁰ Albert Hirschman filled out this logic in a more conspicuously political dimension by noting not only the prospects of "exit" but also "voice."⁹¹ That is, individuals and firms will exercise political influence by myriad devices—voting, financial contributions, and otherwise.⁹² Yet the omnipresent lessons of social choice and public choice theory, perhaps along with decent doses of common-sense intuition, reveal how problematic it is to suppose that mobility will provide a complete antidote to strategic governmental choice.

To say much more about the politics of this predicament would take us far afield from the core purposes of this Article, but we will indulge ourselves to say a few things more. First, even if we suppose some degree of good faith and seriousness of purpose, it will be difficult for governments to move development around in ways that improve welfare insofar as long as the desire to capture agglomeration economies impact individual and firm relocation decisions significantly, as we argue they do. Consider the basic, if seemingly banal, fact, that these decisions are made at the margin, and are substantially path dependent. That is, individuals and firms consider whether to move to areas that already have a certain character. The proprietor of the falafel shop considers her prospects. Is this an area that draws upon the right demographic profile? The administrative decisionmakers of AALS look for conference space based on assessments of neighborhood characteristics and the appeal of one part of D.C. over another. This is an obvious point to be sure, but note that this path dependence, this decisionmaking in the shadow of choices already made and costs already sunk, will make it more difficult for the government to make locational policy. Location decisions are sticky. Where local governments can make best purchase (and

⁸⁹ To be fair, property holders are then taxed, meaning the government does get a cut, but surely a far smaller one than it would get without the restriction.

⁹⁰ See Tiebout, supra note 15, at 418-19.

⁹¹ See Albert O. Hirschman, Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States 40-41 (1970).

⁹² *Id.* at 15-20.

note that we are still assuming, for the sake of this argument, that they are public, not private, regarding) is where they can start tabula rasa. The best scenario for meaningful policies accounting for the location market is where they can render, from the head of Zeus as it were, policies that incentivize just the right mix of firms, individuals, and public services (parks, schools, etc.) on a more or less blank slate. But these circumstances are, to be sure, rather rare.

Second, the capacity of local governments to make these choices in the face of rapidly changing technologies and economic considerations that lie beyond the scope of certain legal and political geographies is limited to say the least. Local governments, about which we will say some more at the end of this Article, are restricted in their ability to control and manage politics-fueled choices by their neighboring competitor local governments.⁹³ They are even more limited in their ability to account for the choices of their "superiors," by which we mean state governments and the federal government. While discrete local-government law doctrines, such as municipal home rule and preemption, shape the relationship among these layers and levels of government, there is a basic political face of life that encumbers even well-motivated local-government decisionmaking, and that is that the governmental units are, themselves, in a dynamic structure of intergovernmental competition and top-down constraint. These considerations will impact in significant, and perhaps underappreciated ways, the temptations, and next the choices, of governments in development policy.

Lastly, and most cynically, of all, we come to the problem of public choice. Because of the influence of regulated parties, there is no reason to assume that governmental policies with respect to relocation of individuals and firms will be optimal.⁹⁴ Land use bureaucracies face relentless interestgroup pressures, and any way you slice it, the most powerful influences will be those firms and landowners looking to capture economic rents from their real or threatened relocations. The modern, deeply skeptical literature regarding firms' competition for relocation subsidies and the related scholarship on the economic inefficiency of relocation-oriented tax expenditures is undergirded by a core principle of rent-seeking and governmental weakness in the face of forceful interest-group influence.⁹⁵ We offer no wisdom on the deep underpinnings of this far-flung literature. Rather, we point—or, given the limited purposes of this Article, maybe it is better to say ges-

⁹³ Paul R. Dommel, *Intergovernmental Relations, in* MANAGING LOCAL GOVERNMENT 135, 146-50 (Richard D. Bingham ed., 1991).

⁹⁴ See WILLIAM A. FISCHEL, THE HOMEVOTER HYPOTHESIS 61-63 (2001). This may be particularly true in big cities, where the tight political control of "homevoters" over politics will be at its nadir. *Id.* at 92-93.

 ⁹⁵ See, e.g., Mark Taylor, Note, A Proposal to Prohibit Industrial Relocation Subsidies, 72 TEX.
L. REV. 669, 690 (1994) (discussing how rent-seeking is exacerbated by special interest groups).

ture—to the public-choice point that governments' decisions involving relocation are, ceteris paribus, likely to be suboptimal.

Of course, the "ceteris paribus" does all the work in this logic. We might well imagine the configuration of structures, rules, and devices to align governmental incentives with salutary private decisionmaking within the framework of agglomeration economics.⁹⁶ If that is not possible, then what, after all, is the mission of prescriptive scholarship that counsels wise public policy? A nuanced rendering of what sorts of policies would be desirable is beyond the scope of our Article. But what is *within* its scope is the observation that the location market is a dynamic phenomenon which must be taken into central account in prescriptive analysis and, further, that the ubiquitous public-choice-related considerations should be appreciated—if not exactly admired—in constructing legal and institutional approaches to addressing concrete socioeconomic dilemmas. To bring this to a bumpersticker-suitable slogan: politics matters, and we must always attend to political matters in our normative analysis.

III. ORDER WITHOUT SUBSIDIES: THE ABILITY OF INDIVIDUALS TO INTERNALIZE AGGLOMERATIVE EXTERNALITIES

The most basic economic justification for zoning, represented in *Village of Euclid v. Amber Realty Co.*,⁹⁷ is that it is an administrative way to reduce the cost of nuisances.⁹⁸ As zoning became more comprehensive, justifying in terms of ordinary nuisances—or even the extended notion of nuisances used in *Euclid*, with apartment buildings compared to parasites⁹⁹—became more difficult. But modern economic justifications of planning, associated with the work of Robert Nelson and William Fischel, derive from similar ideas.¹⁰⁰ They argue that giving local governments, rather than property holders, the right to decide whether a parcel can be developed will lead to efficient outcomes, because the landowner/developer can simply buy the right to build from the local government with relatively low transaction costs.¹⁰¹ Allowing property holders to develop as they please would lead to excessive building, as it would be difficult for nearby landowners to get together to pay off developers for the negative effects of development on the value of the property the neighbors already own.¹⁰²

⁹⁶ For a discussion of just such an innovation, see Roderick J. Hills, Jr. & David Schleicher, *Balancing the 'Zoning Budget'*, REG., Fall 2011, at 24, 24-25.

⁹⁷ 272 U.S. 365 (1926).

⁹⁸ See id. at 394.

⁹⁹ Id

¹⁰⁰ See WILLIAM A. FISCHEL, THE ECONOMICS OF ZONING LAW 95-101 (1985); Robert H. Nelson, Comment, A Private Property Right Theory of Zoning, 11 URB. LAW. 713, 730 (1979).

¹⁰¹ FISCHEL, *supra* note 100, at 69-70; Nelson, *supra* note 100, at 729-30.

¹⁰² See Nelson, supra note 100, at 720.

Critics of this work respond forcefully that the decisionmaking body—the local government—is rarely of the same size as the relevant market for housing or development, meaning that negotiations between the local government and the development will not lead to socially optimal outcomes, among other problems.¹⁰³

But agglomeration economics provides a different potential justification for planning, or at least subsidizing, the location of different types of activity: positive externalities from property use. Agglomeration economies are, by definition, externalities, the gains others receive from being physically proximate to a particular business or individual.¹⁰⁴ Urbanity is a method for capturing these externalities—people locate near the producers of agglomeration externalities so they are not lost into the ether. But, as any good Pigovian knows, individuals do not necessarily consider the effect their actions will have on others, leading to underproduction of socially beneficial externalities.¹⁰⁵ The locational choices of residents and business underproduce agglomerative externalities, perhaps by moving to urban areas in lower-than-efficient numbers. (The analysis is notably complicated by the fact that urbanity also creates congestion, a negative externality, that people similarly also do not properly take into account in location decisions.)

One of the leading engagements between the fields of city planning and economic reasoning is Lewis Hopkins's book *Urban Development: The Logic of Making Plans.*¹⁰⁶ Hopkins argues that a free market for land uses will not work because of what it calls the "Four Is"—the interdependence of different land uses with one another (roughly positive and negative externalities), the indivisibility of infrastructural decisions (roughly, that decisions have to be made in nonincremental units), the irreversibility of building decisions, and imperfect foresight.¹⁰⁷ Hopkins argues that private parties' land use decisions cannot be trusted because of these complications, so extensive city planning by experts is necessary.¹⁰⁸

One can easily dispute the strength of Hopkins's claims (or the degree to which they are unique to land use). But it is relatively clear that the market for land uses is not like the market for grain—there are plenty of sources of market failure. But the existence of market failures cannot, on its own, justify city planning as currently done. Instead, we need to engage in comparative analysis. The justification for extensive land use planning (or

¹⁰³ See, e.g., Richard Schragger, Consuming Government, 101 MICH. L. REV. 1824, 1835-36 (2003) (reviewing FISCHEL, supra note 94).

¹⁰⁴ See Schleicher, supra note 4, at 1512.

¹⁰⁵ See John Prather Brown & William L. Holahan, *Taxes and Legal Rules for the Control of Externalities When There Are Strategic Responses*, 9 J. LEGAL STUD. 165, 166 (1980).

¹⁰⁶ See generally Lewis D. HOPKINS, URBAN DEVELOPMENT: THE LOGIC OF MAKING PLANS (2001).

¹⁰⁷ *Id.* at 25 (internal quotation marks omitted).

¹⁰⁸ See id. at 105.

location-based subsidies) cannot be simply that a free market in land has certain problems. We need to ask whether the costs of planning are less severe than those that occur in (admittedly imperfect) land markets. Further, we need to ask how extensive and programmatic planning or subsidy schemes need to be—we can plan or subsidize a little or lot. Part of this decision will turn on how well private actors manage to change their behavior to mitigate or eliminate the seeming market failures that city planners use to justify extensive regulation of real property.

When dealing with negative externalities, there is a long literature discussing how markets handle these problems absent zoning. In his famous study of Houston, Bernard Siegan showed that land uses that would harm one another generally stayed apart even without a zoning code.¹⁰⁹ The private land market limited nuisances without imposing the heavy costs of zoning regulation.¹¹⁰ Residents can also use contracts—covenants and homeowners' associations—to do privately some of what zoning does through public law, without some of its attendant costs.¹¹¹

Finally, and most relevantly for us here, in *Order Without Law*, Ellickson showed how property holders developed norms for dealing negative externalities that were entirely outside of the legal order created property law.¹¹² Studying ranchers in Shasta County, California, Ellickson showed that the repeated interaction between nearby landowners allowed them to develop rules that were efficient but entirely outside of the property law rules governing the area.¹¹³ This could occur in what game theorists call a repeated-iteration game, with ranchers playing a version of tit-for-tat in order to create cooperative results without recourse to the law.¹¹⁴

Our point is not to try to weigh in on the long argument about when and where zoning is justified to reduce negative externalities, or how extensive it should be in any given case. That is far beyond our project. Previous work has shown that individuals who participate in land markets have their own tools for addressing negative externalities.¹¹⁵ The case for planning or subsidy schemes, or for deciding how extensive such schemes should be, must take these into account.

What we aim to do is to show (or at least to suggest) that private actors in cities have tools for mitigating the underprovision of positive agglomeration externalities, at least in some circumstances. They are not perfect, but they do provide some reasons to believe that people will do okay at produc-

¹⁰⁹ See Siegan, supra note 7, at 114 (describing how industry voluntarily separates itself from residential areas).

¹¹⁰ See id.

¹¹¹ Id. at 78-79.

¹¹² ELLICKSON, *supra* note 12, at 52-53.

¹¹³ Id.

¹¹⁴ *Id.* at 227 (naming the ranchers' approach an "Even Up strategy").

¹¹⁵ See, e.g., Siegan, supra note 7, at 78-79 (discussing use of covenants by private individuals to handle negative externalities).

ing and capturing the microagglomerations that were the subject of the last Section without a vast system of subsidies or taxes. In contrast, for fixed investments and for agglomeration- and congestion-based externalities that affect large areas, we have less reason to believe that these landowners' informal tools will work particularly well.

First, firms in cities can move around a lot. The reason ranchers and farmers in Ellickson's Shasta County example could work out a rule about cattle-based nuisances is that they were longtime landowners who had multiple interactions with each other over time.¹¹⁶ In a city, though, this clearly isn't true—people and firms are less likely to remain in one place for a very long time. But their movement opens up other possibilities. Firms that can relocate without substantial costs (services, retail, etc.) can try various mixes of neighbors until one works. When other similar firms engage in these repeated location decisions, all of the parties have room for "negotiations" after a fashion. This allows them to decide not to move if the other firms don't, or to arrange to move at the same time. These negotiations can work if you assume that agglomeration effects are somewhat reciprocal—if we decide to co-locate, I'll get your agglomeration externalities, and you'll get mine.

Certain types of social ties often exist that allow businesses to coordinate their location decisions and to take into account their agglomeration externalities. One of the most frequent is ethnic and religious homogeneity.¹¹⁷ Most of the over 2,000 diamond stores on 47th Street are almost all run by orthodox Jews, and almost a third of those proprietors are Hasidic.¹¹⁸ The added social trust that exists among coethnics can serve to allow for a weak form of "contracting" that internalizes some of the external benefits of locational decisions, as well as to create certain social sanctions for, say, locating your diamond business on another block. Other industries have different ethnic links that permit this type of coordination—one in particular that has attracted some academic work is Korean laundries.¹¹⁹

But ethnic ties are far from the only way firms can work together to produce an optimal amount of agglomeration externalities. Industry organizations and even more informal social ties can turn a big city into a small

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¹¹⁶ ELLICKSON, *supra* note 12, at 55.

¹¹⁷ See, e.g., Ricard Gil & Wesley R. Hartmann, Airing Your Dirty Laundry: Vertical Integration, Reputational Capital, and Social Networks, 27 J.L. ECON. & ORG. 219, 219-20 (2009) (discussing impact of ethnic ties on economic performance).

¹¹⁸ See Diamonds Are Forever, TIME, Apr. 2, 1979, at 25. The importance of social trust allows diamond sales to be done without written contracts:

The high value the Hasidim place on personal honor sets the tone for the street, where packets of diamonds worth hundreds of thousands of dollars are traded by verbal agreements. Says one dealer: "If I broke my word in a deal, the word would be passed, and I would be dead in the business. No one would talk to me. I would be shunned."

Id.

¹¹⁹ Gil & Hartmann, *supra* note 117, at 220-22.

town. If you ask a chef if she has met another chef in the same city, her answer will almost universally be "yes."¹²⁰ The existence of these social networks allows for some type of coordination in location decisions.¹²¹ But networks are not always adequate; the diamond dealers of 47th Street also have an official organization—the Diamond Dealers Club—in which issues can be hashed out and contract disputes solved without need for resorting to formal legal processes.¹²²

Finally, some third-party institutions encourage "negotiation" between tenants over location decisions. The most important is surely the developer. A developer can choose tenants for its building that complement one another. The developer will not do so out of any idea of civic betterment, but simply because she can charge higher rents to, say, a strip of bars if each of them knows that the developer will continue to try to find bar tenants if one leaves. They can even do this across projects. Developers frequently specialize in a specific neighborhood.¹²³ There are other reasons for this—e.g., investments in knowledge of the property stock and the ability to work with a familiar community board or local politicians-but concentrating their efforts allows developers' to shape the characters of neighborhoods. Developers have incentives to find businesses that will complement one another, and in pursuing these benefits, they will reduce the problem of insufficient provision of agglomerative externalities. And while it may be difficult to imagine negotiations across the twenty or so businesses on a block that would allow for informal contracts to internalize agglomeration externalities, it is far easier to imagine such negotiations happening between two or three developers.

For residents, the tools for solving the problems of internalizing the gains from microagglomerations come in weaker forms. Locationally defined social organizations, from Little Leagues to churches, provide venues for the types of discussions necessary to encourage people to consider the effect their presence has on the lives of their neighbors. The hip coffee shops that are the first sign of gentrification in a developing neighborhood can be thought of hubs for coordinating behavior, with early adopters finding one another and, through doing so, convincing each other to stay. And developers surely build housing with an eye toward the retail they or others will also be able to provide.

¹²⁰ Josh Ozersky, *Why Portland Is America's New Food Eden*, TIME (Nov. 17, 2010), http://www.time.com/time/nation/article/0,8599,2031652,00.html (discussing how the status of Portland, Oregon, as a food mecca is partially due to the fact that all the chefs seem to know each other).

¹²¹ Of course, it is equally probable that these ties could allow for less-savory types of coordination like using social sanctions to enforce informal price fixing.

¹²² See Diamonds Are Forever, supra note 118, at 26.

¹²³ Lydia DePillis, *Farm Teams: Why D.C.'s Developer Fiefdoms Are Good for Neighborhoods*, WASH. CITY PAPER HOUSING COMPLEX BLOG (Mar. 31, 2011, 7:51 AM), http://www.washingtoncity paper.com/blogs/housingcomplex/2011/03/31/farm-teams-why-d-c-s-developer-fiefdoms-are-good-forneighborhoods/.

THE LOCATION MARKET

However, as location decisions become more fixed, and as agglomeration economies are felt at areas wider than a block or neighborhood, these tools work less well.¹²⁴ When a business decides to build a huge factory, there are few tools for allowing it to capture the external benefits it produces citywide. The benefits it gets are not likely to be reciprocal to the ones it provides, and they are likely to change substantially over time. Similarly, any individual's effect on macro-agglomerations is unlikely to be accounted for. When a lawyer moves to Washington, D.C., the last thing on her mind is the ways in which she will provide a marginal increase in the depth of the local legal market.

It is hard to say whether these uninternalized agglomeration economies lead to too much or too little density. It is equally the case that no one takes into consideration how his locational decision will affect the cost of housing for others. And absent congestion pricing on roads, no inner-ring suburban driver cares much about her marginal effect on the traffic felt by others. But we can say that there is no way to be sure that the mix is optimal.

Because there are some agglomeration externalities that are underproduced, there is some potential space for policy tools like subsidies for businesses likely to provide agglomeration externalities or land use planning that forces physical concentration in certain industries. We have reasons, however, to be skeptical of these policies. Teresa Garcia-Mila and Therese McGuire created an ingenious model that showed that competition among businesses for local-governmental subsidies could be good for both the city doing the subsidizing and for the country as a whole.¹²⁵ They argued cities would compete to lure firms, and the one with the highest willingness to pay would be the city that is best capable of capturing the firm's agglomeration externalities.¹²⁶ However, when they examined actual tax-subsidy competition between several cities over Boeing's headquarters (eventually won by Chicago), it did not look anything like this-there did not seem to be much consideration for the local differences in ability to capture agglomeration externalities.

Using land use planning to provide subsidies to specific industries is likely worse than simple cash subsidies. A common method of using planning to subsidize firm location is noncumulative zoning for manufacturing.¹²⁷ Cities carve off swaths of land to serve as manufacturing zones, where—contrary to traditional zoning principles—less intense land uses like housing are not permitted. This does provide a subsidy to manufacturing firms, but it is does not provide much bang for the buck. First, it is hard

¹²⁴ See Schleicher, supra note 4, at 1536.

¹²⁵ See Teresa Garcia-Milà & Therese J. McGuire, *Tax Incentives and the City, in* BROOKINGS-WHARTON PAPERS ON URBAN AFFAIRS 2002, at 95, 95, 100-11 (William G. Gale & Janet Rothenberg Pack eds., 2002).

¹²⁶ *Id.* at 114.

¹²⁷ Hills & Schleicher, *supra* note 2, at 249-53.

to target. General categories like "manufacturing" do not tell us much about which types of firms are likely to have big agglomeration externalities, but more limited lists of land uses frequently result in underused space. Even more pressing, it is inefficient for the firms, because they must take their subsidy in land, which shifts how they produce goods. Evidence suggests these are pretty ineffective policies,¹²⁸ even if the land market does not result in optimal location decisions, because firms ignore their effect on others.

The common use of noncumulative zoning points to a bigger issue. Noncumulative zoning is a popular option for local governments because the costs it imposes on others is hard for voters to track.¹²⁹ Each decision to use noncumulative zoning takes a little land away from development for housing or retail, driving up prices and generating deadweight loss. But the parties who are harmed—current renters and potential new residents—are not likely to get involved because the effect on each one of them is so small. And developers who have not already bought property in a noncumulatively zoned area are not likely to spend too much energy lobbying on the issue. Further, while interest groups compete directly for spending in printed budgets, there is less competition for these types of in-kind subsidies. Noncumulative zoning provides politicians with a way of giving something to an active interest group and hiding the costs.

CONCLUSION

The principal purpose of this Article is exhortation. We argue for local-government and land use scholars to pay attention to the key insights of agglomeration economics (and, too, some of the central lessons from political economy as they bear on governmental decisionmaking in a complex and constrained market) and to note the ways in which the location market impacts policy choice. Yet we do have some preliminary hypotheses about how greater attention might plausibly shape policymaking.

First, and very much echoing large strands in the modern publicchoice-flavored land use literature, we see good reasons to be skeptical about the efficacy of specific redevelopment decisions where these decisions purport to capture discrete economic rents for the benefit of the vox populi. Even where there are underproduced externalities, governments will have difficulty doing better than private decisions by individuals and firms in determining the socially optimal location of buildings and particular land uses. Indeed, individual and firm sorting follows a logic (some of which is distinctly economic, and some of which, such as lifestyle or dating factors,

¹²⁸ See id. at 267-72.

¹²⁹ *Id.* at 261, 270-72.

flows from other sources) that is difficult for governmental decisionmaking to penetrate.¹³⁰

On a second and related note, the basic logic of comprehensive city planning and Euclidean zoning is hard to square with the phenomenon of a location market. Euclidean zoning, after all, sets out to impose location decisions—or, at the very least, creates major sorting costs—on individuals and firms. It does so not only to "rationalize" development in a discrete geographical area and the city writ large, but also to accommodate individual and firm interests. Attention to the location market suggests that such zoning is unlikely to realize both of these interests. Moreover, as the social-norms literature associated with Ellickson and others shows,¹³¹ there are good reasons to believe that nongovernmental structures might do a better job than command-and-control in accommodating individual and firm decisionmaking.¹³² This is not to entirely cast aside zoning as a tool for dealing with nuisances or other problems, but rather to question the need for it to go as far as it does in its modern comprehensive form.

Third, a fuller account of the location market will shed light on a myriad of other puzzles in local-government and property law. Consider the hoary doctrine of "coming to the nuisance." The conundrum that famous cases such as Boomer v. Atlantic Cement Co.¹³³ and Spur Industries v. Del E. Webb Development Co.¹³⁴ set out to solve, albeit certainly imperfectly, was how best to allocate burdens and benefits among neighbors while simultaneously accounting for matters of social efficiency.¹³⁵ The classic nuisance situation arises where one individual's optimal use of his property imposes externalities on his neighbor's use of her property. More vexing still is the situation like that in Spur Industries where restricting these externalities may result in net social losses. Without expressing a novel answer to this enduring legal puzzle, we can say that closer attention to the location market-that is, the reasons why individuals might come to locate together in order to gain the benefits of agglomeration-may illuminate certain property law doctrines. In what circumstances, for example, should the young, hip residents of an area of town rich with music clubs be hamstrung by municipal noise ordinances that historically capped decibel counts?¹³⁶ Straightforward Euclidean zoning and traditional property law concepts give us an impoverished vocabulary for resolving these real-life

¹³⁰ This is just a watered-down, land-use-specific version of the famous point made by Economist F. A. Hayek about how markets coordinate information. *See* F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 521-22 (1945).

¹³¹ See discussion supra pp. 658-62.

¹³² See ELLICKSON, supra note 12, at 4.

¹³³ 257 N.E.2d 870 (N.Y. 1970).

¹³⁴ 494 P.2d 700 (Ariz. 1972).

¹³⁵ See id. at 701; Boomer, 257 N.E.2d at 871.

¹³⁶ *E.g.*, ARLINGTON, MINN., ORDINANCE NO. 165 (June 5, 2000).

disputes. A more textured approach to land use policy that takes account of the logic of the location market is likely to do better.

Finally, the location market puts to us some big normative questions about whether and how to encourage this process of sorting and separating. For Jane Jacobs and modern New Urbanists, it is the rough-hewn texture of city streets and the admixture of different uses and individuals that gave cities their lifeblood.¹³⁷ Champions of modern suburban life, like Joel Kotkin and Randal O'Toole, emphasize the benefits of modern suburban living.¹³⁸ Looking at the location market through different lenses, we can see some municipalities capturing the eclecticism that Jacobs and others advocated and other cities crafting conditions for like folks to live, work, and mix with others in a common project. Bangkok is not Singapore; Washington, D.C. is not Levittown. The insights yielded by the growing body of work in agglomeration economics, along with the rich veins of modern political economy, push us to look anew of these major questions of social policy, including the key question: how do we want to live and thrive in a built environment?

¹³⁷ See ANDRES DUANY ET AL., SUBURBAN NATION: THE RISE OF SPRAWL AND THE DECLINE OF THE AMERICAN DREAM 39, 156 (2000); Andres Duany & Emily Talen, *Making the Good Easy: The Smart Code Alternative*, 29 FORDHAM URB. L.J. 1445, 1453-56 (2002); Michael Lewyn, *New Urbanist Zoning for Dummies*, 58 ALA. L. REV. 257, 257-59 (2006).

¹³⁸ Joel Kotkin, *Paths to Prosperity*, AM. ENTERPRISE, July-Aug. 2003, at 32, 34; Randal O'Toole, *The Folly of "Smart Growth"*, REG., Fall 2011, at 20, 20.