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LAND POLICIES AND THEIR OUTCOMES

Edited by Gregory K. Ingram and Yu-Hung Hong

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Issues and Themes

Gregory K. Ingram and Yu-Hung Hong

Between 1998 and 2005, 16 organizations, including the Canadian International Development Agency (CIDA), United Nations Development Programme (UNDP), U.S. Agency for International Development (USAID), and World Bank, produced policy papers analyzing how to use *rural land policy* as an instrument to alleviate poverty in developing and transition countries (UNDP 1999; USAID 2002; CIDA 2003; Deininger 2003). By contrast, the role of *urban land policy* in shaping city development in member countries of the Organisation for Economic Co-operation and Development (OECD) and developing countries has been given less attention. For that reason, questions abound. For example, how do government regulations and other public actions affect land and property prices in urban areas? What role do land policies play in determining the amount and location of public and private investments? To what extent can revenue raised from taxing land and buildings finance local expenditures? What land policy prescriptions can deal with rapid urbanization in some nations or declining cities in others? How are housing demand and land market development changing in developed and developing countries, and how are they affected by land policy decisions? Answers to these questions will have important consequences for the livelihoods of the millions of people who are living in the major cities around the world.

In June 2006 the Lincoln Institute of Land Policy held a conference in Cambridge, Massachusetts, to address these questions. The goals of the conference were to raise awareness of the importance of land policy in shaping urban development and to explore research topics in urban economics and planning that might have significant policy implications. The two-day gathering attracted some 100 scholars and practitioners. Some presented their papers and commentaries; others asked pointed and intriguing questions. The papers presented at the conference make up the chapters of this book, grouped within five themes:

- Public actions and property prices
- The importance of land value in today's economy

- Land and property taxation
- Urban development and revitalization
- New developments in land and housing markets

This introductory chapter presents the five themes and the main messages of the related chapters and commentaries.

Public Actions and Property Prices

Between 1980 and 2006, the average price of housing in the United States rose almost fourfold (OFHEO 2006). According to recent estimates of aggregate property values, the mean housing value in California increased by about 450 percent—from $115,800 to $641,400—between 1980 and 2005.[1] Over the same period, the mean housing value in Massachusetts increased by over sixfold—from $64,370 to $420,134.

The growing demand generated by rising incomes may have partly contributed to the escalation of housing prices. The mean value of the income elasticity of demand for housing is 1.18.[2] If income growth is the main determinant of increased housing value, the 553 percent increase in the mean housing value in Massachusetts would be associated with a rise in income of 468 percent. However, Bureau of Economic Analysis data indicate that from 1980 to 2005 per capita personal income in Massachusetts grew by only 312 percent (from $10,602 to $43,702), which should have led to an increase in housing values of only 368 percent (Bureau of Economic Analysis 1980–2005).

What accounts for the difference? To what extent has local land policy, such as zoning, caused the rise in property prices? In chapters 2 and 3, respectively, Edward L. Glaeser and John M. Quigley analyze how land use regulations have affected housing costs in selected U.S. cities, and they look at the welfare effects of zoning on the economy and nonpropertied groups. Both Glaeser and Quigley conclude that land use regulations have increased housing values in many U.S. cities.

Based on his analysis of U.S. data between 2000 and 2005, Glaeser argues that overly restrictive zoning has probably limited the supply of development rights and driven property prices up. He bases his argument on five facts about the relation between permitting and property prices. First, low levels of permitting are found in high-price areas. For example, the cities of San Francisco and New York issued very few permits for new construction between 2000 and 2005, and yet their median housing prices were (and still are) among the highest in the United States. Second, the dearth of permitting did not result from a shortage of land. The number of permits per acre between 2000 and 2005 is strongly correlated with housing density in 2000. In other words, places with initially high density levels

1. Karl E. Case, author of chapter 6 in this volume, made this calculation using Federal Reserve System Flow of Funds Accounts, augmented by data on farmland value from the U.S. Department of Agriculture.

2. Eric Belsky, Zhu Xiao Di, and Dan McCue, the authors of chapter 14 in this volume, produced this estimate based on regressions using data from the American Housing Survey. They used property value as a measurement of the flow of housing services consumed.

typically issued more permits for new development relative to their total land area than did low-density areas. Putting the two pieces of information together, Glaeser asserts that high densities are not the major cause of high housing prices. Third, the median lot size of American homes has increased. In Greater Boston, for example, it grew from 0.76 to 0.91 acre between 1990 and 1998. Because the income elasticity of demand for land in Boston is estimated to be between 0.1 and 0.25, this growth did not flow solely from the rise in real incomes, which only increased by 13 percent during this period. Fourth, neither construction costs nor land prices fully explain high property prices. Glaeser and Gyourko (2003) estimate what they call the "zoning tax" (the payment for the right to develop a lot) and found it to be about 34 percent of the house value for Los Angeles and 19 percent for Boston in 1999. In Manhattan, it was as much as 50 percent of the value of a condominium in 2002 (Glaeser, Gyourko, and Saks 2005). Although Glaeser admits that the direct impacts of zoning on prices are difficult to measure because of spillovers, these estimates are so large that it is hard to refute the significance of land use regulations. Finally, according to his formal measures, he concludes that land use controls are negatively associated with permitting and positively associated with housing prices.

Meanwhile, Glaeser agrees that zoning often serves the purpose of internalizing externalities, and thus establishing a reasonable level of land use restriction is paramount. He suggests that for New York City the optimal zoning tax needed to deal with "structure-related externalities" is about 20 percent of the property value. However, he estimates that the tax is actually as much as five times that amount. More important, in setting up zoning taxes policy makers should consider the marginal social costs of new development across regions. If those costs are the same everywhere, imposing varied zoning taxes on similar communities would distort resource allocation, thereby creating inefficiency.

According to Glaeser, nonstructure-related zoning is the most troubling kind of regulation. For example, limiting construction in inner cities to avoid traffic congestion may only push housing development outward, thereby generating additional traffic from commuter work trips. Restricting the supply of low-cost housing to maintain the homogeneity of the income and ethnic composition of a town contravenes the social goals for greater integration. And constraining the design and size of new houses to internalize fiscal externalities may not be as effective as directly charging the new homeowners a user (or impact) fee.

What are the effects of nonoptimal zoning on the economy? As Glaeser points out, high housing prices are, in effect, a transfer from home buyers to sellers (or from renters to propertied groups). Depending on the consumption patterns of these different segments of the population, aggregate consumption may be lower, thereby dampening growth of the gross domestic product (GDP). At the very least, restrictions on the development of new houses may force more people to live in older homes and lower the utility of housing consumption because of the reduction in the flow of housing services consumed. Zoning also may create price rigidity in the property markets and make housing prices more volatile. Finally, because the population size and employment rate of a region are determined in part by its housing supply, high housing prices may lead to a smaller flow of people into the high-price area and later to higher wages. For example, Glaeser estimates that the economy of the San Francisco Bay Area may be losing $2 billion a year and have a population smaller by 200,000 because its housing costs are on average $20,000 higher than those of other regions.

Like Glaeser, Quigley argues that land use regulations could be welfare enhancing, but only so long as special interest groups do not try to increase construction requirements beyond an appropriate level. Yet empirical and analytical evidence reveals that property owners who can influence land use policy have an incentive to use restrictive zoning in order to keep property values high (see also Fennell 2006).

To support this hypothesis, Quigley describes his own model and three other research projects in detail. The model generates two hypotheses: (1) when the amount of land restricted from development increases, housing prices everywhere will rise, leading to a drop in the demand for housing, lower consumer welfare, and an expansion of city boundaries; and (2) if the amount of area restricted from development remains the same but is located farther away from the city center where land values are low, property prices and land rents will decrease. As a result, the quantity of housing demanded in the city will increase and the urban boundary will expand less. Calibrating the model with stylized data demonstrates that even when only a small percentage of land is restricted from development, the effects on the prices of owner-occupied houses and rental properties are substantial. And locating restrictive areas peripherally generates large gains for existing landowners at the expense of renters and newcomers to the region.

In the first research project described, Quigley surveys studies of the relation between property prices and construction costs. His analysis reveals that since 1986 there has been a divergence between the price of a new single, detached home and construction costs (see figure 3.3 in this volume). Similar studies of Manhattan during 1984–2002 and of over a hundred metropolitan areas during 1950–2000 conclude that the ratio of selling prices to construction costs exceeded one beginning in the mid-1980s. This evidence reaffirms Glaeser's findings.

The second research project, carried out by Malpezzi, Chun, and Green (1998), constructs a regulation index using survey data to measure the direct price effects of land use regulations on properties. Studies using different sample sizes and alternative regulation indexes all find that housing prices correlate significantly with the level of regulation in a city. Moreover, heavily regulated areas exhibit low housing supply elasticities, as suggested by Glaeser in chapter 2.

In the third research project described, researchers at the University of California, Berkeley, are measuring the impacts of regulation on property prices and on the ethnic composition of California cities using a detailed survey of regulatory stringency at the local level. They find that land use policies are likely to affect the distribution of minority households within metropolitan areas and that housing prices increase exponentially with the number of regulations.

Although empirical research has proven that land use regulations have significant impacts on housing supply and prices, both Glaeser and Quigley emphasize that abolishing zoning is not the solution. Rather, further research should focus on identifying an optimal level of government intervention at which the marginal social benefits of regulation equal the marginal social costs. In her commentary on Quigley's arguments, Katherine A. Kiel points out that it is important not only to know the impacts of land use regulations on property prices, but also to understand why localities impose regulations on land use. She argues that high housing prices created by intensive development pressure could have been the cause, not the effect, of more regulations in California and the Northeast. Through understanding the causality, the government may be able to design an optional level of intervention.

Land use control is not the only public action that can affect property values; local service provisions and environmental conservation also play a role. From the Tiebout perspective, Thomas J. Nechyba analyzes in chapter 4 the efficiency and equity issues related to local service provisions under U.S. fiscal federalism. The idea that land and housing markets often facilitate interjurisdictional competition is central to Charles M. Tiebout's argument but implicit in his original article (Tiebout 1956; Fischel 2006). Nechyba makes that connection explicit.

The Tiebout model may have significant implications for the solution of the excessive zoning tax (or "monopoly zoning") problem discussed by Glaeser and Quigley. If interest groups manipulate zoning requirements to keep property prices high in a neighborhood, communities with similar attributes will emerge—as predicted by the Tiebout model—and will use less stringent land use restrictions to attract home buyers to their areas. Housing demand in the more regulated area will decline, and property prices will fall. This "exit-entry" mechanism will continue until housing prices in all communities are equalized. Thus, the Tiebout model suggests that excessive zoning should not endure in the long run.

Nechyba notes, however, that there is no ideal world in which the supply of local jurisdictions is perfectly elastic, household mobility is unconstrained, transaction costs are absent, and interjurisdictional tax and spending spillovers do not exist. So long as these assumptions of the Tiebout model do not hold in reality, there is always room for political maneuvering, rendering the idea of voting with one's feet inefficacious.

Nechyba is particularly concerned about the inequitable outcome implied in the Tiebout model—educational opportunities for children will be unevenly distributed. He calls this outcome "categorical inequity," and argues that sorting local residents according to their ability to pay for public services will inevitably lead to racial segregation. Poor Hispanic and African American households are likely to live in jurisdictions where the quality of public schools is low—not because they do not want their children to attend good schools, but because high housing prices prevent poor minority families from purchasing property in the more expensive neighborhoods and gaining access to the higher-quality public schools and other public services provided in those areas.

Nechyba proposes as a potential remedy decoupling school choice from residential location. Because enrollment in private schools is not restricted to particular residential areas, minority households can shop for housing bargains in lower-price communities and yet have the freedom to choose a good private school for their children if they can afford it. Another policy entry point, as Daphne A. Kenyon suggests in her commentary on chapter 4, is the governance structure for the provision of public education. Should there be more competition among smaller school districts, or should new mechanisms be invented at the state level for facilitating tax base sharing and resource equalization? These complications of Tiebout efficiency notwithstanding, Nechyba asserts the importance of the model in shaping views on how public goods can be provided effectively in a world characterized by externalities, imperfect competition, and asymmetric information.

Environmental preservation—or more specifically conservation easements—is another area of public action that affects property values (chapter 5). According to Andrew J. Plantinga, by 2005 about 3.9 million acres of land in the United States were enrolled in five major federal conservation easement programs. In addition, in 2003 some 1,500 private land trusts held over 5 million acres of land under easements. Despite the growing importance of easements as a tool for land conservation, many questions about them remain unanswered. Foremost among these questions is how acquired (or donated) conservation easements affect property prices, the size of cities, and property tax revenues. In chapter 5, Plantinga reviews the existing empirical studies of the effects of conservation easements on property values. He also provides a static urban-spatial model to simulate welfare changes with respect to the size of conservation easements, using the ratio of property tax revenue to local service provision as an indicator. Plantinga examines three scenarios: (1) a city closed to immigration with fixed lot sizes; (2) a closed city with variable lot sizes; and (3) a city open to immigration with fixed lot sizes. Outcomes of the theoretical analysis are then compared with the findings of previous empirical studies.

Plantinga finds that under all three scenarios a conservation easement that curtails the supply of developable land in a city will increase land rents within the entire area (except the land with the easement). If the lot sizes are fixed, the city expands by exactly the size of the easement. When lot sizes are variable, higher land rents induce land users to substitute capital for land, leading to higher development densities. As a result, the city expands by less than the size of the easement. If the city is open to immigration, the change in its size will depend on how attractive the improved amenity level is to existing residents and newcomers. Thus, in this situation the potential impact of the easement on the size of the city is ambiguous.

The most interesting prediction of Plantinga's model is the effects of a conservation easement on property taxes. Calibrating his model with stylized data, he finds that with fixed lot sizes the increase in property tax revenue will exceed additional public expenditures as long as the size of the easement is small (between 0 and 50 percent of the original city size). The rise in land rents will increase property tax collections from real estate in the entire city that outweigh the loss of property taxes on the land with the easement and any increase in public expenditures due to the expansion of the boundary. If the easement is large (over 50 percent of the city size), residents will be displaced and forced to live farther away from the center, thereby necessitating additional local expenditures to serve this population. When the displacement effect is combined with the fall in the property tax revenue, a large easement could reduce the ratio of property taxes to expenditures for the provision of local services. If lot sizes are not fixed, higher densities may slow the expansion of the city and thus lessen the increase in demand for public services.

Certainly, additional empirical tests are needed to ascertain the validity of Plantinga's predictions. It is also important to learn how conservation easements might affect different segments of the population. For example, would the increase in land rents largely benefit the propertied group at the expense of renters and the poor—an issue raised by Glaeser, Quigley, and Nechyba? In his commentary on

Plantinga's chapter, V. Kerry Smith suggests that a community should question whether the forgone tax revenue associated with easements results in the "right" mix and level of public amenity. Plantinga's chapter provides analytically based hypotheses that can be tested empirically.

The Importance of Land Value in Today's Economy

Land is one of the three main factors of production. Its value relative to capital and labor can determine both the mix and the quantity of the different inputs used in production. Despite the importance of land, few studies have looked at the extent to which land (or land rent) can determine public and private investments in today's economy. Thus, in chapter 6 Karl E. Case analyzes the trend of land and property values through time, and in chapter 7 David Barker estimates the total value of land for selected U.S. metropolitan areas. Both Case and Barker conclude that land values still constitute a significant share of national wealth in the United States.

Analyzing the historical trend of land values in the United States from 1975 to 2005, Case contends that the total value of developed residential and nonresidential plus agricultural real estate increased over that period from \$3.7 to \$34.7 trillion—a nominal increase of nearly tenfold (see table 6.10 in this volume). This figure is significant, Case argues, in comparison with the \$40 trillion in financial wealth held by households. In 2005 land value alone accounted for 31 percent of the total real estate value, increasing from \$735.8 billion in 1975 to \$10.8 trillion in 2005. Case also reports his estimates of land values for owner-occupied houses, residential property, and nonresidential real estate. Land values for all property types grew as fast as the values of the structure and land combined. These results demonstrate that increases in real estate value stemmed largely from land value increments. In view of these findings, Case predicts that in coming years land rents will continue to play an important role in determining property prices and real estate investment.

In his commentary on chapter 6, Stephen Malpezzi identifies additional research areas for land value. These include (1) analyzing the effects of income and demographic changes on housing prices; (2) incorporating agglomeration and its impacts on productivity of capital and labor into measurement of land values; (3) making the growth of the city endogenous; and (4) considering the roles of housing capital.

In chapter 7, Barker estimates land rent as a percentage of total personal income for four metropolitan statistical areas (MSAs)—Los Angeles, Chicago, Philadelphia, and Dallas. Using the local capitalization rate to convert the calculated capital value of land into annual rent, he calculates total land rents (excluding roads) for the central county in each of the four MSAs. The ratios of land rent to personal income for these cities are 0.22, Los Angeles; 0.236, Chicago; 0.147, Philadelphia; and 0.275, Dallas (see table 7.3 in this volume). Based on these results, Barker argues that total land values are still significant relative to personal income and that land taxation may provide a meaningful source of revenue for large municipal governments. In his commentary on chapter 7, Robin A. Dubin proposes an additional method, kriging, of measuring land values for cities that are multicentric. It will be interesting to compare the results produced by this method with those generated by the cubic spline—a tool on which Barker relies.

Overall, Barker's and Case's estimates of land rents add validity to the arguments presented in the previous chapters in this book that land policy matters.

Land and Property Taxation

When Henry George (1992) made a passionate case for the "single tax" in *Progress and Poverty*, he assumed that such a tax could provide enough revenue to finance municipal expenditures and reduce inequality without affecting efficiency. This assumption might have held in George's day when the role of the government was small and personal wealth was largely reflected in land ownership. Today, however, the amount of local spending is immensely larger relative to GDP than it was a century ago. Personal holdings are also diverse; they include stocks, bonds, and other instruments, aside from real estate investment. Thus, today land rents are considered by many scholars to be less important in light of economic progress.

Now that the authors of chapters 6 and 7 have demonstrated that land values are significant in today's economy, the next question is to what extent could local governments employ land and property taxation to recoup a portion of these land values for financing local services and infrastructure? In chapter 8, Richard W. England tackles this question and explores the possibility of shifting the conventional property tax imposed on both land and buildings to a pure land tax in selected U.S. cities. In chapter 9, Richard M. Bird and Enid Slack examine the potential of land and property taxation in developing and transition countries.

Although economists have long recognized that taxing immobile factors, such as land, creates fewer deadweight losses than does taxing mobile factors, such as labor and capital (Mills 1998), England points out that the current practice of many U.S. municipalities seems to be moving in the opposite direction—more emphasis is being put on taxing income sources and transactions (see also McGuire 2001). He advocates revenue-neutral tax reform that would tax land more heavily than improvements. He also proposes replacing local business and personal income taxes and sales taxes with a higher land tax.

In assessing the feasibility of a pure land tax system, England examines the property tax structures of five U.S. cities: Chicago, Milwaukee, Philadelphia, Phoenix, and Washington, DC. He finds that only one of the five cities, Phoenix, could shift from the current property tax to a single land tax without raising the tax rate to a confiscatory level with no fiscal loss.

Using a dynamic scoring analysis—an approach that is the subject of Robert M. Schwab's commentary on chapter 8—England contemplates how tax reduction on capital, labor, or retail sales, combined with a higher land tax rate, could boost economic development. If the price elasticity of land supply is zero, other things being equal, heavier taxation of land will have no effect on resource allocation. Although land prices may fall, the total payments for using land (after-tax rents plus taxes) will remain unchanged. Because land consumption and pre-tax land rents are unaltered, the deadweight losses of taxing land are zero.

Lighter taxation of capital and labor will increase capital investment and labor supply, thereby enlarging the bases for local income taxes. Besides, new investment that can retain and attract residents and businesses to the city will bid up urban land prices. With the rebound of land prices, a municipality could further increase land tax collections, recovering more than the financial losses generated by the cut in taxes on wages and corporate earnings. The implication of these predictions is that cities suffering from disinvestment and fiscal crisis could reduce their distortionary taxes on mobile factors and shift to land taxation. According to England's logic, this strategy may stimulate an economic recovery in these cities with no significant losses in municipal revenue.

In chapter 9, Bird and Slack present a less optimistic view of the use of land and property taxation in developing and transition countries. First, they caution policy makers and analysts that in developing countries the prospects of land and property taxes may not be realized.[3] In terms of its role in local public finance, property tax revenue accounted for an average of 0.43 percent of GDP and 22.3 percent of local revenue in developing countries during the 1970s, 1980s, and 1990s. Although they do play a role in financing local expenditures, property taxes are barely significant, because, according to Bird and Slack, they are more difficult to reform than other taxes. These difficulties include the disconnection between public service provisions and tax collection, the uncertainty involved in the distribution of the economic incidence of the property tax, technical issues of assessing property values (or land values alone) for tax purposes, and complications in tax administration. Because of these problems, Bird and Slack suggest that the rapid implementation of a market value–based property tax system in developing countries may not be viable. In fact, a focus solely on tax assessments may undermine the entire reform effort. The reform goals must be clear, and they should be primarily to raise public funds and not to influence land use and economic development. In addition, political will, strong commitment from all levels of government, and thoughtful planning on legislation, administration, training, and adjudication are all important prerequisites for successful reform. Bird and Slack conclude their survey of property taxation in developing and transition economies by urging that more attention be paid to urban and rural differences (and the unique conditions in the areas between the two) in property tax reform. A brief illustration of how some of these arguments may be applied to China's current property tax reform is also provided.

In his commentary on chapter 9, Miguel Urrutia adds two more interesting points to the discussion of the property tax experiences of developing countries, especially in Latin America. First, he asserts that there is a strong relationship between the significance of property taxes in a municipal government budget and the level of local services provided under decentralization. He points out that low property taxes in some Latin American countries may have been a factor in the relative backwardness of the region. Second, he also describes how the collection of the property tax could be integrated with collection of the wealth tax in Colombia. Assessed property values for tax purposes are employed as bases for estimating the presumptive income tax, thereby mediating the problem of underreporting and tax evasion.

Urban Development and Revitalization

Urban development, the subject of the next group of chapters, has been exhibiting very different patterns around the world. In chapter 10, Rakesh Mohan presents his

3. See Netzer (1998) for the implementation difficulties associated with the land tax.

observations of the urbanization patterns in Asia during the twentieth century and projects the challenges that selected Asian countries may face in the future. In chapter 11, Peter Hall discusses chronologically the urban regeneration effects undertaken in the United Kingdom over the past 30 years. Finally, chapter 12 offers an opportunity to contrast the U.K. experiences with those of the United States. Eugénie L. Birch discusses past attempts by municipalities to revitalize U.S. inner cities.

According to the UN figures cited by Mohan, only 29.8 percent of the world's population lived in urban areas in 1950. By 2000 that percentage had increased to 47.2, representing a nearly threefold increase in the urban population, from 751 million to 2.9 billion over the 50-year period. The increase in the Asian urbanization rate was even more striking. From 1950 to 2000, the urban population of Asia grew from 244 million to 1.4 billion. By 2030 an estimated 54 percent of Asians (2.7 billion) will be living in urban areas, which is almost twice the number for 2000.

Of the ten most populous countries in the world, six are in Asia, with China and India at the top of the list. Although only two cities worldwide, New York and Tokyo, had over 10 million residents in 1950, by 2000 the number of megacities had expanded to 18. By 2015 the number of megacities is estimated to reach 22, with 12 of them in Asia. All these figures point to the fact that Asian countries have been rapidly urbanizing over the past decades, and this trend will continue over the next 30 years.

In the face of rapid urbanization, what challenges lie ahead for city governments in Asia? Mohan suggests that, first, under conditions of increasing globalization and higher incomes, city dwellers will have high expectations about both the quantity and the quality of local services. But will the fiscal resources be available to finance urban services and infrastructure? Second, because of changes in global competition, the demand for labor has increasingly veered toward the more highly skilled workers. Thus, in addition to providing the traditional infrastructure such as roads, water, and sewers, local government officials also must consider other public investments, including higher education, research, and telecommunications technology. Third, managing rural-urban migration will be a daunting task. Planners will have to ensure that densely populated urban areas have an adequate supply of land for housing development and transportation networks. And, fourth, local governments must find ways to develop the financial markets in Asia in order to channel domestic and international savings toward financing urban infrastructure.

The British urban development patterns discussed by Hall are very different from those in Asia. The deindustrialization and technological changes of the 1970s and 1980s resulted in severe job losses in Britain's major industrial centers. Between 1966 and 1983, 3.1 million manufacturing jobs were lost in the north of England. Urban centers such as London, the West Midlands, Greater Manchester, and Merseyside saw their populations depart for suburban areas when the increase in service activities failed to generate enough employment to compensate for the job losses produced by deindustrialization. By looking at how London has dealt with these urban changes since 1977, Hall is able to provide a historical description of the government's policy on inner-city regeneration between 1977 and 2006, including its experimentation with diverse approaches.

Although the British government is highly centralized, its urban renewal policy devolved to local urban authorities after issuance of the White Paper on Inner Cities in 1977. Regional aid was cut dramatically, and funds were redirected to increase expenditures on urban programs. The idea of using quasi-public agencies, such as urban development corporations (UDCs), to spur inner-city investment also began during this period. Yet the effectiveness of UDCs, as Hall argues, was questionable (with the exception of London Docklands). Thus, the Conservative government of Prime Minister Margaret Thatcher established enterprise zones to induce private investment in economically depressed areas. These zones provided investors with expedited planning procedures, rates (property tax) exemptions, and simplifications of other bureaucratic processes for operating a business in these areas. The effect of this program in terms of generating jobs was modest, however.

In the mid-1990s, the British government shifted its attention to redeveloping brownfields—a step triggered by the projection of a major housing crisis. The redevelopment of abandoned land and buildings was perceived to achieve the goals of reaching housing targets and of renewing derelict neighborhoods. In 2002 it became evident that voluntary collaboration between the public and private sectors was less effective in achieving the urban regeneration and employment goals than an effort directed by an executive body with clearly defined mandates, powers, and resources. As a result, since 2002 various new local delivery vehicles (LDVs), including the former UDCs and slightly weaker urban regeneration corporations (URCs), have begun to form. Recently, however, questions have been raised about the extent to which these LDVs should have more local planning powers and the authority to capture land value increments arising from their activities. Concerns also have been voiced about having too many overlapping and ineffectual agencies within a jurisdiction. At present, it is unclear how these matters will be resolved.

In her commentary on chapter 11, Jody Tableporter, the chief executive officer of a URC in Peterborough, shares her belief that more planning and other powers will be granted to the URCs. She also asserts that the British government is contemplating a "roof tax" to raise funds for financing the development activities of the URCs. As for the problem of overlapping initiatives, she proposes lessening the confusion by clearly defining the roles of different levels of government.

The U.S. urban renewal strategies described by Birch in chapter 12 are similar in many ways to the British urban regeneration methods; both are community-based and oriented toward public-private partnerships. Birch divides the U.S. urban revitalization strategies into four categories. The first category, catalytic urban renewal programs, comprises large-scale projects that draw political and financial support from key leaders in the public and private sectors. In the second category are programs that adopt an approach to revitalizing downtowns that treats these areas as "super" neighborhoods with mixed land uses, including commercial, residential, educational, cultural, and entertainment development instead of merely central business districts. The third category consists of neighborhood revitalization programs that are based on bringing together public and private groups within a community to work on complicated regulatory, financing, and land acquisition issues. The entities central to this strategy are the community development corporations (CDCs) and anchor institutions such as universities, hospitals, churches, and housing authorities. Fourth, to attract consumer expenditures to their neighborhoods, some cities have employed a project-focused strategy that entails construction of an expensive, large-scale facility such as a convention center, a performing arts venue, or a sports stadium.

How did these diverse strategies come about? Under what conditions should policy makers follow one or a combination of these strategies? In answering these questions, Birch begins by pointing out that important attitudinal changes toward cities have emerged in the twenty-first century. Once again, the urban center is recognized as a place that possesses resources and talents. One strength is its ability to facilitate face-to-face interactions that are critical to the functioning and growth of a high-technology or knowledge-based economy. Meanwhile, inner cities are no longer perceived as centers of poverty and crime, but are more often portrayed as places with historic architecture or strong ethnic communities. It is also now expected that the public will participate directly in community affairs. Public hearings, consultations, and other community outreach programs have become essential parts of the decision-making processes in urban neighborhoods. Communities have also acknowledged that the involvement of the private sector in neighborhood revitalization efforts is essential. These attitudinal changes place CDCs in a strategic position to enhance public participation in and solicit private support for community development, thereby gaining wide public acceptance of such efforts. According to Birch, decisions about redevelopment strategy will largely depend on local economic, social, and political conditions. Her chapter provides the array of options from which communities can select in designing their own strategy to fit unique local circumstances.

In his commentary on Birch's chapter, William C. Apgar's projection of inner-city revitalization in the United States is less optimistic. He identifies six issues that hinder urban renewal efforts: (1) growing income inequality; (2) the continuous out-migration of middle-income households to suburban areas; (3) relocation of jobs to the suburbs; (4) excessive land use regulations; (5) the persistent concentration of poverty in cities; and (6) the central location of affordable housing. He recommends an approach to rejuvenating urban areas that consists of improving education, confronting racial discrimination, and increasing access to affordable housing.

New Developments in Land and Housing Markets

A major issue that Glaeser and Quigley raise in their chapters is that of excessive regulation inflating housing prices and thereby generating an affordability problem for poor urban households. The U.S. government housing programs for assisting low-income families are administered largely at the state and local levels, and they include the Section 8 (Housing Choice Voucher) program, Section 202 program (for the elderly), Section 811 program (for the disabled), Community Development Block Grant funds, and HOME Investment Partnership Act funds. With the exception of the last two funds, most programs focus mainly on rental housing subsidies.

A "third sector" approach that has existed for a long time but only recently has attracted attention is the community land trust (CLT). In chapter 13, Steven C. Bourassa provides a detailed analysis of the potential of this affordable-housing scheme. Under a CLT, homeowners pay for, and thus own, only the buildings they occupy, not the land. The idea underlying this arrangement is closely related to the arguments presented in the chapters by Glaeser, Quigley, Case, and Barker—that is, the increase in property prices in some major U.S. cities is largely caused by the rise in land values (or zoning tax). By retaining land ownership, a CLT retains the most rapidly appreciating element of housing while selling only the structure to a household. This scheme allows CLTs to provide subsequent owners with affordable housing because the escalating land value is not part of the housing cost to the household. Under this arrangement, a CLT homeowner realizes any capital gain only from an increase in the value of the structure, which is normally a fraction of the total price increase. Meanwhile, that same homeowner enjoys the flow of full housing services (land and building) while paying only for part of it. As Bourassa contends, CLTs provide access to shared-equity home ownership for households that might otherwise be unable to buy a home in the private housing market. The scheme is, at least in principle, the preferred choice for households that want to build up equity and that otherwise would rent.

Indeed, Bourassa calculates that when mortgage interest rates are low and the appreciation rate of housing values is high relative to the return on alternative investment, owning a CLT home is preferable to renting. Conversely, owning a CLT home is not preferable to renting in a declining property market with high mortgage interest rates. High property tax rates and maintenance costs also could reduce the financial benefits afforded by CLT home ownership. In short, Bourassa finds that CLT ownership is not always advantageous and will depend on market conditions. A detailed cost-benefit analysis of varied scenarios based on different mortgage rates, housing value appreciation rates, and resale formulas is also presented.

In his commentary on chapter 13, Stephen C. Sheppard raises further questions about CLTs. Among other things, he wonders about their cost-effectiveness relative to the amount of federal subsidies received, the effects of limited equity on community participation, and the equity impacts of CLTs in comparison with other public home ownership programs.

Another interesting trend in the U.S. housing market is the growing number of households owning second homes. This topic is of interest because households that divide their consumption of housing services among two or more properties may make distinct housing decisions relative to households that own only one residence. For example, because budgets are constrained, homeowners who decide to split their housing consumption between two residences could afford two less expensive houses rather than one primary home of higher value. This could have important implications for housing demand in terms of the size and location of property, thereby affecting the urban form and investment decisions in land and housing markets. Because most housing demand models assume single-home ownership (except for models that address real estate as an investment), predictions for the future urbanization pattern and housing demand could be affected. Nevertheless, the topic of second- or multiple-home ownership has largely been unexplored.

In chapter 14, Eric Belsky, Zhu Xiao Di, and Dan McCue discuss the findings of their study on second-home ownership for consumption purposes, focusing on the income elasticity of housing demand. Based on regressions using data from the American Housing Survey (AHS) and the Survey of Consumer Finances (SCF), Belsky, Di, and McCue find that age (after controlling for income and wealth) is the predominant variable associated with second-home ownership, and that people in the 55–64 age group are the most likely to own second (or vacation) homes. According to the authors' estimates based on AHS data, this segment of the population is 6.5 times more likely to have a second home than people under age 35. Besides age, ethnicity and education also play a significant role in multiple-home ownership.

As for the relationship between income and multiple-home ownership, owning a second home appears to lower the income elasticity of demand for the primary residence, because financial resources are split between two houses instead of concentrating on one. A comparison of the demand elasticities for primary and second homes reveals that the income elasticity of demand for second homes is lower than that for primary residences. For households that do not own a second house, income elasticities of housing consumption range from 0.92 to 1.66 and are higher relative to the elasticity (0.83) for those owning a second home (see table 14.5 in this volume). This result indicates that second-home ownership can lower the income elasticity of total housing demand.

In his commentary on chapter 14, Michael Carliner discusses some of the complications involved in measuring the income elasticity of demand for second homes. First, the quantity of housing demanded is not easy to observe. Second, the high transaction costs involved in changing one's home may motivate a homeowner to purchase a second home instead of relocating to a new community for a larger residence. Third, the preferences of recent home buyers will provide better data for measuring the effect of owning a second home on the demand for the primary residence than will information about existing homeowners. And yet this approach is limited by data availability. Finding ways to resolve these modeling and data problems may lead to new insight into the study of second homes.

As does the United States, Brazil faces many housing policy challenges. David E. Dowell points out in chapter 15 that Brazilian housing is expensive and lacks local services and secure land tenure—a phenomenon that results from property market inefficiency. Although data from 1970 to 2000 indicate that the permanent housing stock was able to keep pace with the increase in household formation, urban dwelling units received fewer local services (piped water) in Brazil than in countries whose income level is comparable with Brazil's. The reason is that Brazil's investment in local infrastructure has not risen fast enough to meet the demand generated by the increase in housing production. Lack of serviced land increases land prices and induces further expansion of informal urban settlements, which Dowell defines as areas that lack access to local services.

In Brazil, informal land and housing markets, estimated to account for about 40 percent of the total increase in housing production between 1991 and 2000, have significant impacts on urban development. First, as cities expand, land consumption per capita has been increasing, thereby exacerbating the already limited supply of serviced land for housing construction. Second, the emergence of informal housing developments away from the city center forces populations to travel greater distances to jobs, increasing commuting costs and reducing social welfare. Third, low-density, dispersed development leads to higher infrastructure cost per capita. In dealing with these problems, Dowell proposes that urban land and housing strategies in Brazil include both curative and preventive elements. The government should continue its efforts to upgrade housing conditions in informal areas and, at the same time, develop more land for housing and local infrastructure construction.

In his commentary on chapter 15, J. Vernon Henderson offers an alternative explanation for the poor housing conditions in Brazil, analyzing the issue from a political economy perspective. During the 1970s and 1980s, political elites in cities may have sought to limit the in-migration of low-income households to their areas. One tactic used to deter the infiltration of undesirable residents was to offer them poor housing. Henderson asserts that in view of the recent development of democratization in Brazil and thus the direct election of local officials, local services should have improved because residents now have the power to vote. He calls for additional analyses with detailed data.

Henderson's proposal, which ends the volume, crystallizes the need for continual research on urban land policies that play an important role in shaping the livelihoods of many people around the world. Although the issues raised by the chapter authors have certainly not been fully resolved here, the goal is to bring these matters to the attention of scholars and policy makers in order to stimulate research and dialogue on these topics.

REFERENCES

Bureau of Economic Analysis. 1980–2005. State Bearfacts. http://bea.gov/bea/regional/bearfacts/statebf.cfm.

CIDA—Canadian International Development Agency. 2003. Promoting sustainable rural development through agriculture. Policy report. Quebec: CIDA.

Deininger, K. 2003. *Land policies for growth and poverty reduction*. World Bank Policy Research Report. Washington, DC: World Bank and New York: Oxford University Press.

Fennell, L. A. 2006. Exclusion's attraction: Land use controls in Tieboutian perspective. In *The Tiebout model at fifty: Essays in public economics in honor of Wallace Oates*, W. A. Fischel, ed. Cambridge, MA: Lincoln Institute of Land Policy.

Fischel, W. A. 2006. 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*, W. A. Fischel, ed. Cambridge, MA: Lincoln Institute of Land Policy.

George, H. 1992. *Progress and poverty.* New York: Robert Schalkenbach Foundation. (Originally published in 1879.)

Glaeser, E., and J. Gyourko. 2003. The impact of building restrictions on housing affordability. *Federal Reserve Bank of New York Economic Policy Review* 9(2):21–39.

Glaeser, E., J. Gyourko, and R. Saks. 2005. Why is Manhattan so expensive? Regulation and the rise in house prices. *Journal of Law and Economics* 48(2):331–370.

Malpezzi, S., G. H. Chun, and R. K. Green. 1998. New place-to-place housing price indexes for U.S. metropolitan areas, and their determinants. *Real Estate Economics* 26(2):235–274.

McGuire, T. J. 2001. Alternative to property taxation for local government. In *Property taxation and local government finance*, W. E. Oates, ed. Cambridge, MA: Lincoln Institute of Land Policy.

Mills, E. S. 1998. The economic consequences of a land tax. In *Land value taxation: Can it and will it work today?* D. Netzer, ed. Cambridge, MA: Lincoln Institute of Land Policy.

Netzer, D., ed. 1998. *Land value taxation: Can it and will it work today?* Cambridge, MA: Lincoln Institute of Land Policy.

OFHEO—Office of Federal Housing Enterprise Oversight. 2006. House price appreciation slows. Press release, September 5. http://www.ofheo.gov/media/pdf/2q06hpi.pdf.

Tiebout, C. M. 1956. A pure theory of local expenditure. *Journal of Political Economy* 64:416–424.

UNDP—United Nations Development Programme. 1999. *Attacking poverty while improving the environment*. New York: UNDP.

USAID—U.S. Agency for International Development. 2002. *Nature, wealth and power: Emerging practice for revitalizing rural Africa*. Washington, DC: USAID.