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**FISCAL  
DECENTRALIZATION  
AND LAND POLICIES**



**Edited by Gregory K. Ingram and Yu-Hung Hong**

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# Fiscal Decentralization and Land Policies

Edited by

*Gregory K. Ingram and Yu-Hung Hong*

 LINCOLN INSTITUTE  
OF LAND POLICY  
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## PREFACE

Because it defines local governments' powers to raise revenues and to spend on local public goods, fiscal decentralization has important implications for land policies. The degree of fiscal autonomy, in turn, determines the authority local jurisdictions have to tax real property and influences their ability to manage urban growth and preserve the environment. The links between fiscal decentralization and land policies, however, are not explicit. To elucidate these connections, *Fiscal Decentralization and Land Policies* presents the main contributions to a Lincoln Institute conference that addressed the effects of decentralization on local policies. The conference, "Fiscal Decentralization and Land Policies," was held in Cambridge, Massachusetts, in June 2007. Conference papers examined decentralization experiences in developed and developing countries, including local public good provision, jurisdiction size, public school finance, local environmental policy, urban economic development strategies, local fiscal prudence, and income distribution.

Following Lincoln's practice, the conference encouraged cross-disciplinary and international dialogue on land policy issues. Accordingly, urban economists, public finance experts, regional and urban planners, and government officials were invited, as were policy analysts who have advised governments in developed and developing countries on the design and implementation of fiscal decentralization.

Three overriding themes emerged from the discussions at the conference and are discussed in the chapters of this book. First, analyses of decentralization effects on local service provision in selected industrialized and developing countries have yielded mixed results, with no firm evidence of either positive or negative net effects on populations. Second, fiscal decentralization affects local policies differently across sectors. For example, varying degrees of interjurisdictional competition in the United States do not seem to affect local environmental policies and economic development strategies significantly, but more centralized public school finance has altered financial and nonfinancial resource allocation across school districts in some states. Third, decentralization can have varying effects on land use policy and property taxation. For example, evidence strongly indicates that the size of the jurisdiction affects the stringency of land use regulations. The role of U.S. property taxes as an important source of local revenue also depends on the degree of centralization of local public school finance. This book offers extensive discussions on the complexities involved in assessing decentralization experiences and identifies research areas that need immediate attention.

We owe thanks to many people for their help in making the conference and this publication possible. We thank all the contributors for presenting their research and comments at the conference and for their efforts in revising what are now the chapters and commentaries of this book. We are also grateful for



the assistance provided by our conference planning team, Vikram Bapat, Brooke Digges, and Rie Sugihara. Diana Brubaker assisted in getting the final manuscript into the proper format for copyediting. Last, but not least, our heartfelt thanks go to the editorial and design team, including Nancy Benjamin, Kathleen M. Lafferty, Emily McKeigue, and Vern Associates for their editorial expertise and professional help.

Gregory K. Ingram  
Yu-Hung Hong

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# INTRODUCTION



# 1

## *The Nexus of Fiscal Decentralization and Land Policies*

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Gregory K. Ingram and Yu-Hung Hong

**T**he study of fiscal decentralization has important policy implications for urban growth management, environmental conservation, and property taxation.<sup>1</sup> First, fiscal decentralization gives local governments powers to set local taxes and make local expenditures. Second, in many countries local governments also have powers to regulate land uses within the general guidelines set by higher authorities. These two powers can and do interact so that municipalities often make land use decisions while considering their fiscal effects. Hence, an understanding of the degree to which local and provincial governments can exercise power, make decisions about their revenues and expenditures, and are held accountable for outcomes is crucial for land policy research and education.

The devolution of power to subnational governments is controversial. Advocates claim that decentralization will increase both efficiency and equity in the public sector because it allows customization of public services to local preferences, promotes scrutiny by citizens of government expenditures, and encourages innovation through interjurisdictional competition (Oates 1972, 2006; Tiebout 1956). Critics are, however, concerned about a lack of local administrative capacity, potential corruption, and the risk of “elite capture” (McLure

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We thank Diana Brubaker for her careful comments on the earlier draft of the chapter.

1. In principle, fiscal decentralization requires devolution of decision-making power to local governments to determine revenues and expenditures and to the citizens of municipalities to elect local public officials. Thus, in this chapter, decentralization means both fiscal and political decentralization unless stated otherwise.

1995; Prud'homme 1995; Sewell 1996). The importance and duality of the arguments on decentralization provided the rationale for the Lincoln Institute to hold a conference to discuss these issues in June 2007.

### *Aims and Themes*

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The conference goals were to review decentralization experiences in Organisation for Economic Co-operation and Development (OECD) countries and developing nations and to explore areas of consensus and disagreement among scholars and analysts on the opportunities and risks of decentralization. Three key themes emerged from the conference papers. The first theme concerns the extent and effectiveness of local service provision under decentralization. The evidence presented shows that the degree of decentralization (local government share of all government spending) has changed little since the 1970s in either OECD or developing countries. Moreover, results on the link between decentralization and effectiveness are mixed due to weak measures of decentralization across countries and the lack of data for disaggregate analyses. Some speakers asserted that country experiences have been too brief to realize the benefits of decentralization fully or that the objectives of decentralization vary significantly across cases, rendering a comprehensive evaluation difficult. Although most presenters agreed that countries will continue their decentralization efforts in the future, they disagreed on the implementation strategies and welfare implications of this trajectory.

The second theme focuses on the connections between decentralization and local policies, appraising how decentralization is related to jurisdiction size, public school finance, local environmental policy, and urban economic development strategy. Two studies showed that differences in the size of jurisdictions and in local control over the financing of local public schools have led to differences in the stringency of zoning policies across jurisdictions (smaller jurisdictions are more restrictive) and in the distribution of per student expenditure and average class size among school districts (property tax limits lowered per student expenditures and raised class sizes). In contrast, other empirical analyses of environmental regulation and economic development strategies found no strong evidence to support the notion of a "race to the bottom" caused by decentralization.<sup>2</sup> In sum, decentralization does matter; but its effects may not be consistent across all land policy areas.

Finally, the third theme addresses the effects of intergovernmental transfers on other issues such as local fiscal prudence and the association between decentralization and income distribution. Both issues pose major challenges to fiscal

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2. See Oates and Portney (2001) for a summary of the debate related to the "race to the bottom."

decentralization. Similar to other empirical papers, results from cross-country comparisons are mixed because of theoretical and methodological issues. The consensus was to put more effort into refining the methods of evaluating decentralization reforms and designing institutional arrangements. Three speakers discussed new institutional arrangements to mediate the challenges to decentralization. Their proposals were mainly about redefining the boundaries of the public and private sectors to create a competitive environment in which efficient and equitable provision of local public goods is facilitated.

The conference papers in this volume are therefore grouped into sections relating to the three themes:

- Achieving decentralization objectives
- Decentralization, local governance, and land policy
- Emerging challenges and opportunities

Chapters 2 through 4 reveal the theoretical complexity and methodological difficulties involved in evaluating decentralization programs across countries. Chapters 5 through 9 analyze decentralization's effects on local policies. Finally, chapters 10 through 14 highlight challenges to decentralization and explore new institutional strategies for facilitating its implementation.

### *Achieving Decentralization Objectives*

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At the 2005 World Summit, many developing countries confirmed their commitment to design and implement national development strategies targeted to achieve the Millennium Development Goals (MDGs). Because more than 70 percent of the MDGs would be achieved primarily through subnational governments, decentralization is the predominant governance structure for delivering to the poor the basic services—public health, education, water and sanitation—that are critical to achieving these goals. Since the 1980s, as many as 75 countries have implemented decentralization policies as a means to ensure more efficient public service delivery and address poverty issues.

Decentralization has progressed in Central Europe and the Baltic states, where European Union accession has provided a strong incentive. In addition, decentralization is a high priority for many international aid agencies, such as the International Monetary Fund (IMF), United Nations Development Programme (UNDP), and the World Bank, which have all been actively involved in advocating and supporting decentralization reform in many countries.

Despite the overwhelming support for decentralization programs, there is little agreement among scholars and policy makers, and scant empirical evidence, as to whether the devolution of power to subnational governments actually increases or decreases their effectiveness in supplying public goods and raising own-source revenues. In chapter 2 Roy Bahl observes that the degree

of decentralization has not changed. He reports that, from the 1970s through 2005, the average subnational government share of public expenditures in developing countries remained at about 13 to 14 percent of total public spending. For OECD countries, the percentages were also stable, ranging from 32 to 34 percent during the same period. Subnational government tax collections as a share of the total revenue in developing and OECD countries also experienced no drastic changes.

Bahl highlights two difficulties in assessing decentralization outcomes in less developed nations. First, decentralization is often a remedy for certain specific political or social problems rather than just a fiscal strategy. This duality complicates evaluation because matching theory with practice is difficult. Second, policy makers have given limited attention to the implementation of decentralization programs. Implementation is often flawed because governments do not fully recognize the benefits and costs of decentralization and the preconditions necessary for successful reforms. As a result of these oversights, decentralization in many countries has progressed slowly, with long time delays before benefits are realized. Bahl argues that it is too early to examine the full effects of decentralization.

In chapter 3 Paul Smoke examines local revenue generation under fiscal decentralization in developing countries. He finds that local capacity for generating own-source funds is rare due to a lack of attention to local politics. According to Smoke, public finance experts often use a narrow technical framework to analyze local revenues, thereby overlooking the political ramifications of reforms. For example, the sequence of implementing a viable reform has not been given due consideration. He suggests that local governments should first implement simple and politically acceptable changes and then follow them by more complex and controversial transformations. Tax increases or initiation of new levies must be associated with improvements in local service delivery. Classroom-based or on-the-job capacity building is also crucial. In sum, Smoke advocates a broader approach to local revenue reform: (1) the design of local revenue systems should include mechanisms for connecting with taxpayers; (2) local fiscal reforms should be contemplated, along with the larger decentralization and public sector reform agenda; and (3) more research on the political and strategic aspects of revenue reform is needed.

Responding to Smoke's challenge to the conventional fiscal analysis approach, Robert D. Ebel's comments take a more optimistic view on the issue. Although he agrees with Smoke that a narrow framework is often used to analyze local revenue reforms in developing countries, he believes that there are merits to the Western economic approach: it helps identify similarities between local revenue systems both in developed and developing countries and among developing economies. Ebel also cites examples in Central and Eastern Europe, where a broader framework has been applied successfully.

In chapter 4 Ehtisham Ahmad, Giorgio Brosio, and Vito Tanzi survey the related literature of decentralization experiences in selected OECD countries. Examining whether decentralization improves the performance of public educa-

tion and other local service provision, they review four areas: (1) productive efficiency; (2) regional convergence of service delivery; (3) preference matching; and (4) decentralization and economic growth. They conclude that existing studies fail to provide sufficient evidence to support the assertion that decentralization improves effectiveness of service delivery. The main reason is the lack of linkage between expenditure and revenue assignments to local jurisdictions. Subnational governments are normally unable to raise enough own-source revenues to finance unfunded mandates. Decentralization also does not seem to promote regional convergence of service delivery, preference matching, and economic growth. As Ahmad, Brosio, and Tanzi argue, these results may be due partly to the limited implementation of decentralization reforms in some OECD countries and partly to data and measurement problems.

Contrary to Ahmad, Brosio, and Tanzi's assessment, Paul Bernd Spahn in his commentary argues that the outcomes of secondary education are positively correlated with the level of decentralization in Spain. The findings of a cross-country study on health care also indicate that decentralization seems to have reduced infant mortality rates. These inconsistent results call for better methodologies and measures of decentralization in future empirical studies. One possibility is the case study method, which can elucidate the heterogeneity and specificity of decentralization effects in different countries.

### *Decentralization, Local Governance, and Land Policy* —————

How does decentralization shape local governance? How does it thereby determine the incentive system for government officials to manage urban growth and the environment and to finance local services? The contributors to chapters 5 through 9 analyze four issues—jurisdictional size, public school finance, environmental protection, and local economic development—that have direct and indirect links to local land policy and land use.

William A. Fischel in chapter 5 argues that metropolitan areas with more fragmented and decentralized government structures are more likely to have a lower elasticity of housing supply than those dominated by large communities. At the opposite end of the scale, metropolises with few large jurisdictions may behave like monopolists and adopt overly stringent land use policies to boost local property prices. Fischel's argument is that homeowners are easier to organize in smaller municipalities than in larger communities, lowering the transaction costs of enlisting voters' support for restrictive land use regulations, which can maximize home values. In contrast, developers may have more influence over local governments in metropolitan areas that are controlled by fewer and larger municipalities because it is more costly to organize homeowners where the number of parties involved is large. Fischel's findings are important for understanding how zoning restrictions across municipalities in the United States vary by jurisdiction sizes.



Lee Anne Fennell comments that to reduce exclusionary zoning, it would be more promising to examine differences in the motivation of homeowners and developers to influence land use regulation rather than to examine variations in jurisdiction sizes. It seems more productive, she asserts, to align the interests of the two parties than to transform government structures. Fennell supports Fischel's proposal to establish a home-value insurance market that can compensate for adverse effects on homeowners' property values caused by new development.

One of the most controversial issues related to U.S. fiscal federalism is the financing of local public schools through property taxation. In theory, the system follows the principle of matching expenditures on public schools with preferences of local residents to pay property taxes for the services. If a home buyer wants a specific type of education for her children, she may buy a property in a neighborhood where the school system provides the desired education, financed by homeowners' property tax payments. Although this scheme may match preferences with expenditures and link the benefits of the services to costs, it is likely to lead to unequal access to quality education. Children of poor households that cannot afford to buy a home in affluent school districts may be excluded from their preferred school choices.

In response to this unintended outcome of fiscal federalism, movements have emerged to centralize the finance of education at the state level. In chapter 6 Daniel P. McMillen and Larry D. Singell Jr. examine two major measures—property tax limits and school finance reforms—and analyze how these policies affect real expenditures per student and average class sizes across school districts based on 1990 and 2000 data from 48 states. They find that the combined effect of property tax limits and school finance reforms led to a greater equalization of real expenditures per student across districts, with the 1990s policies having more profound distributional effects than did the policies implemented in the 1970s and 1980s.

McMillen and Singell also assess the effects of the two measures on real expenditures per student and average class sizes separately. In terms of real expenditures per student, the joint effect of property tax limits and school finance reforms led to a reduction in the number of districts with low expenditures, yet tax limitation alone increased the number of low-expenditure districts. The implication is that school finance reform provided a stronger impetus to equalize school expenditures by pushing spending across school districts toward the mean.

Regarding average class sizes, for policies implemented before the 1990s, both tax limits and school finance reforms made average class sizes more equal across school districts. In addition, school reforms (without tax limits) as adopted in the 1990s created more districts of similar average class sizes. In contrast, with no school finance reforms, the 1990s tax policies increased in the number of districts with large average class sizes. Overall, the estimates produced by McMillen and Singell indicate that centralization of public school finance in the United

States by means of property tax limits and equalization of school spending led to a more equal distribution of resources across school districts.

It is unclear, however, if the changes have improved social welfare because the heterogeneity of local preferences and the private responses to the reduction of educational spending were not incorporated into the analysis. In his commentary on chapter 6, Dennis Epple highlights the descriptive nature of the nonparametric analysis. He suggests that additional econometric analyses are needed to explain the observed changes in the distribution of educational expenditures and class sizes.

Some scholars are also concerned about subnational government effectiveness in setting environmental policy under decentralization (Jaffe et al. 1995; Levinson 1997; List and Gerking 2000; Oates and Portney 2001). Local governments may be too lax in establishing regulations to control pollution that can be exported to other jurisdictions. Moreover, municipalities may lower the standard of their environmental policy just to attract investment. In chapters 7 and 8 Shelby Gerking and Hilary Sigman, respectively, address the potential problems associated with decentralization of environmental policy.

Gerking analyzes the effect of state tax rates on the disposal of chlorinated solvent wastes in the United States. He finds that changes in the disposal costs of these chemicals as a result of increases in state tax rates did not have a significant impact on waste generation and disposal. Between 1988 and 2004, the disposal of chlorinated solvents decreased by 96 percent. For plants included in his study sample, the decreases were 78 percent during the same period. The reasons for the dramatic reduction were twofold: (1) the introduction of aqueous cleaners; and (2) increases in the recycling and reuse of the chemicals. As Gerking admits, these technological changes reduced the use of chlorinated solvents so greatly that it was difficult to identify any separate effect of the state tax rates. By examining data prior to the technological changes (1988–1990), Gerking found that firm decisions on the generation and disposal of chlorinated solvent wastes also did not respond to changes in state tax rates. Hence, he asserts that assigning to the states greater responsibility for regulating chlorinated solvent wastes had not resulted in inefficiency because waste disposal taxes had no effect on firm behavior.

In response to Gerking's analysis, Lawrence Susskind suggests another way of looking at the issue. Avoiding a race to the bottom, Susskind argues, involves civil society in environmental policy making and enforcement and a focus on innovation and technology sharing. Rewarding investors and stockholders who "green" their companies by recycling and using clean substitutes is also important. Debate on the governance structure of environmental protection should focus on these issues. Regulations are secondary, Susskind asserts.

In chapter 8 Sigman presents a cross-country analysis of the relationships between decentralization and environmental quality. She employs four measures in her study: (1) access to improved sanitation; (2) wastewater treatment; (3) ambient sulfur dioxide; and (4) the size of protected land areas. The results

show no consistent effects of decentralization on environmental quality. Although decentralization seems to decrease access to sanitation, it increases the amount of land allocated to protected areas. In both cases, however, the estimated values of the coefficients used in Sigman's econometric model are not statistically significant.

Maureen L. Cropper, in her commentary on Sigman's analysis, finds the results surprising for two reasons. First, she expects that decentralization will increase sanitation access because it is a classic example of public goods that can be provided at the local level financed by households and firms that are direct beneficiaries of the service. Sigman's estimates indicate otherwise. Second, the environmental benefits of expanding land conservation areas may have spillover effects on adjacent jurisdictions; thus, in principle, local governments may not have the incentive to restrict land development, unless local politics induce homeowners to vote for excessive zoning, as Fischel describes in chapter 5. Again, Sigman's study implies that decentralization is positively correlated with the size of the preserved land. To explain these counterintuitive results, both Sigman and Cropper agree that better modeling and international data on environmental quality are needed. Besides, decentralization measures across countries are crude, which may in turn affect the results of the econometric analysis. Needed are greater international efforts to collect information about the net effect of decentralization on local environmental conditions across countries.

Similar to the decentralization of environmental policy, scholars and analysts also express concerns about the welfare effects of interjurisdictional competition on economic development under U.S. fiscal federalism. As taxing and spending powers are decentralized to state and local levels, subnational governments may offer tax breaks and public land at discount values to businesses to lure investment. Local economic development strategies—such as property tax abatements, subsidized financing for investment, job training, land concession, expedited incorporation, and quality public service provision—are often used to attract businesses and individuals, but it is unknown if these strategies are welfare enhancing. Sally Wallace discusses this topic in chapter 9.

Based on the survey of existing theoretical and empirical literature and specific case studies on automobile plant locational incentive packages in the Southeast, Wallace concludes that there is no hard evidence to prove that interjurisdictional competition has either enhanced or reduced welfare. Wallace emphasizes that most studies did not focus on measuring welfare changes or the opportunity cost of incentive packages. She suggests that a case study approach may be a more effective assessment method.

Jeffrey S. Zax found Wallace's assessment of existing studies convincing. He argues that many factors that some models do not take into consideration—such as peer effects—determine a firm's location. Besides, most studies employed a partial, rather than general, equilibrium analysis approach. In speculating on the distributional effects of interjurisdictional competition, Zax suggests that the major beneficiaries of the incentive packages may be the recipient firms and real

estate owners. Any positive effects on workers in terms of better employment opportunities and higher wages are likely to be minimal.

### *Emerging Challenges and Opportunities* ---

Managing intergovernmental fiscal relations and political and social development under decentralization can be challenging. Chapter 10 discusses intergovernmental transfers, and chapter 11 covers income distribution. Under fiscal decentralization, two major roles of central government are resource redistribution and financing of public goods that have large spillover effects. Both objectives can be achieved through intergovernmental transfers or grants. If central government grants are not predetermined and nonnegotiable, however, they may lead to fiscal excess at subnational levels. On one hand, transfers may induce local governments to spend more and incur more debt (the so-called deficit-bias hypothesis). On the other hand, fiscal shortfalls and indebtedness of grant-receiving jurisdictions may require central government bailouts, leading to the problem of soft-budget constraints.

In chapter 10 Luiz de Mello, using panel-based aggregate local government data from 13 OECD countries, examines the causal relationship between intergovernmental transfers and subnational jurisdictions' net worth. He found a stable, inverse relationship between current transfer receipts and local government net worth, implying that local indebtedness increases with more transfers from the center. In terms of causality, the results are mixed. Using dynamic fixed-effects estimators, de Mello discovered that transfers cause indebtedness, which supports the deficit-bias hypothesis. Moreover, other evidence also suggests that a deterioration of net worth is due to increments in current transfers. He argues that soft-budget constraints may be a problem in some OECD countries and recommends introducing tighter fiscal rules.

Ronald C. Fisher provides different interpretations of de Mello's results. He states that central government transfers may improve local fiscal conditions, thus lowering the cost of utilizing debts to finance infrastructure investment. Besides, matching grants for capital investment normally require local governments to cover a portion of the investment costs. Hence, it is perfectly rational for jurisdictions to use debts to finance local capital investment, and an increase in local indebtedness may not necessarily mean a lack of fiscal controls.

Another major challenge of fiscal decentralization is its effects on income distribution. Theoretical discussions have questioned whether decentralization increases regional disparities when subnational governments with different natural endowments compete for labor and capital. According to Jorge Martinez-Vazquez and Cristian Sepulveda in chapter 11, however, very little attention has been given to theoretical and empirical assessments of the effects decentralization has on household income distribution at the national level. In trying to identify the linkages between decentralization and income distribution, they conclude that it seems almost impossible to state their association a priori because of

the numerous direct and indirect channels through which decentralization can improve or worsen income distribution. Martinez-Vazquez and Sepulveda also examine the relationship empirically, using data from 48 countries for the period from 1970 to 2000. They suggest that public expenditure decentralization exacerbates income inequalities in countries where the government's share of real GDP per capita is small. As the size of the government increases, decentralization begins to have a significant positive effect on income distribution.

Christine P. W. Wong comments on Martinez-Vazquez and Sepulveda's postulate as a major finding, provided their hypothesis can be verified. She points to a potential problem with the measure of decentralization used in their analysis: because expenditure decentralization is not always accompanied by revenue decentralization, relying on the former as an indicator to measure the degree of decentralization runs the risk of overstating the fiscal decision-making power of subnational governments. As in earlier chapters, Wong notes the inadequacy of fiscal decentralization measures across countries.

In addition to discussing the challenges of decentralization, chapters 12 through 14 explore several alternative institutional arrangements for future reforms. As discussed earlier, the traditional public school finance system under U.S. fiscal federalism has generated concern that the use of housing markets to ration resources and students to public schools may increase income and racial segregation. In chapter 12 Thomas J. Nechyba explores possible solutions, using a simulation model calibrated to the characteristics of New Jersey school districts in 1990. According to his simulations, centralizing public school finance reduces inequalities in per student expenditures across public school districts, as found by McMillen and Singell in chapter 6. Nechyba, though, argues that spending equalization can only be achieved at the expense of lower average school quality. When accounting for private school competition, his model predicts that centralizing public school finance will reduce the level of segregation across school districts because some households do not have to pay a high housing premium for public school when their school choice is separated from their housing decision. The problem in this scenario is that private schools have the competitive advantages of being able to "cream-skim" nonfinancial resources, such as better students and teachers, thereby lowering public school quality.

To solve this problem, Nechyba advocates a "choice-based" school resource rationing system in which students are assigned to both public and private schools based on an algorithm that includes parental preferences, "walk zones," and lotteries. This mechanism, Nechyba argues, can (1) retain the traditional role of residence-based admissions by including walk zones as one of the assignment criteria; (2) foster the matching of students to schools by incorporating parental preferences into the decision; and (3) minimize cream-skimming by providing public funds only to the private schools that are willing to participate in this choice-based rationing system. This proposal's major implication is that school financing will become more centralized, relying more on state income and sales taxes rather than local property taxes as revenue sources. Decisions

about the design of the algorithm that defines priority classes for school allotments can be retained at the local level, however.

Responding to Nechyba's proposal, Helen F. Ladd asks how race may factor into the model, an issue Nechyba discusses briefly in the concluding section of his chapter. Ladd also adds another interesting dimension to the discussion by describing school systems in other countries where private schools are entitled to public funds and public schools are encouraged to charge fees. She cautions that the devolution of school operational authority to the district level should only be implemented with a careful consideration of local capacity.

In chapter 13 Robert H. Nelson describes an important change in local governance structure under the U.S. federal system. There has been a rapid increase in the number of residence-based, voluntary community associations (CAs) formed by private developers to supplement municipal services and regulation. According to Nelson, about half of the new housing units between 1980 and 2000 were subject to the governance of a CA. In 2007, 20 percent of the U.S. population (or 60 million people) lived in CAs, whereas the 1970 estimate was only 1 percent. If this trend continues, Nelson argues, CAs may transform the traditional functions of local government. Future municipal responsibilities may be more regional in scope. They may include, for example, supplying water and sewer services, fire protection, citywide crime prevention, arterials, rapid transit systems, courts of law, and other public goods with significant economies of scale. Some aspects of land use regulation and the provision of microservices, such as garbage collection, street cleaning, and neighborhood security, will be undertaken by CAs.

What facilitates this change? Nelson asks. Could the growing private governance of neighborhood be integrated into the traditional local government structure? Nelson proposes a transaction-cost framework for analyzing these questions. He hypothesizes that CAs may have a comparative advantage over the traditional municipalities to minimize the transaction costs of (1) fine-tuning voting rules for matching local services with resident preferences; (2) negotiating for dispute resolutions at the neighborhood level; (3) controlling aesthetics; and (4) transferring the management responsibilities of the commons from one contractor to another. In contrast, municipalities can collect taxes and enforce statewide standards of land use regulation and local service provision more effectively than CAs.

Commenting on Nelson's trajectory, Robert W. Helsley raises two issues related to the transfer of municipal responsibilities to CAs. First, as CAs take over some existing municipal functions, the public sector may partially withdraw from the provision of local services. Helsley argues that residents who are neither high-demanders nor low-demanders of local services will be worse off because they are presented with the choices of either over- or underprovision of public goods. Second, maintaining one community's security by gating can divert crime to other neighborhoods, which may, in turn, encourage all other communities to gate. The result may be overgating and subsequent welfare loss.

As discussed in chapters 7, 8, and 9, interjurisdictional competition under fiscal decentralization may give local governments the incentive to lower their environmental policy standards or grant businesses with lucrative tax exemptions and favorable land deals so as to attract investment. Although these strategies seem sensible for individual jurisdiction, the aggregate effects of this type of competition are not always welfare enhancing. In chapter 14 Clifford F. Zinnes proposes an innovative approach to shaping interjurisdictional competition in which all players know the rules and rewards of the game in advance to engender a “race-to-the-top” competitive environment. Zinnes calls it prospective interjurisdictional competition (PIJC). In applying PIJC to organize intergovernmental fiscal relations under decentralization, a central government can be perceived as a donor that provides funds to local jurisdictions for specific reform purposes or provision of local services. To ensure efficiency, central authorities set goals and the corresponding tasks for achieving the targets. They also establish indicators for measuring outcomes, specify all monetary and in-kind rewards, and offer technical assistance. The final step is to design the tournament by identifying municipalities that are willing to participate and defining the time frame. In PIJC the central government does not dictate how each jurisdiction will achieve outcomes. Instead, calibrating the task selection, scoring method, and reward structure will become the major components of the central government’s grant project.

Unlike the contracting approach, the PIJC approach needs only a set of tournament instructions when policy goals and the related tasks are determined. The decision to participate in the tournament and how to achieve the preordained objectives will be left to each jurisdiction. It is assumed that autonomy and explicit rating systems and rewards would stimulate local initiatives to cooperate. Intensive project monitoring for compliance required in the conventional approach would be replaced by the scheduled publicity of participants’ performance throughout the tournament. In a situation in which scarce resources need to be allocated to best performers who are unknown to a central government or foreign donor, the PIJC promoted by a tournament would reward a limited number of contestants for achieving the best possible outcomes based on a set of predefined assignments.

José Roberto R. Afonso and Sérgio Guimarães Ferreira caution the general applicability of the PIJC approach to developing countries. They indicate that the idea is mainly designed to improve the management of foreign aid for donor organizations, such as the World Bank and the United States Agency for International Development, and that there are major differences between intergovernmental transfers and foreign aid. First, in most countries, intergovernmental transfers are earmarked and linked to central government tax revenues. Changing the current system of grant allocation to a tournament system may face strong political resistance. Second, the tournament approach cannot be used to allocate cost-sharing grants whose purpose is to help local governments provide social services to the population. If poor regions have to compete with devel-

oped areas for this central assistance, they will be in a disadvantageous position. It is the less developed jurisdictions that need more help from the center.

### *Conclusions*

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The contributions in this volume support three major findings. First, the analyses of decentralization's impacts on public service provision have yielded mixed results, with no consistent evidence of either positive or negative net effects on populations in industrialized and developing countries. Arguments generated from studies that employ the currently available measures of decentralization are not robust across nations. Additional empirical research to improve measures of the degree of decentralization is needed to inform the analysis of decentralization's effects.

Second, each chapter provides interesting specific insights on how decentralization (or centralization) may affect local policies. On the performance of particular sectors, the availability of different interest groups to shape local policies varies with jurisdictional sizes and leads to varying degrees of restrictiveness in land use regulation. Centralizing local public school finance has important implications for the allocation of financial and nonfinancial resources across school districts. Interjurisdictional competition under decentralization does not seem to have significant effects on local policies for environmental protection and economic development. Although some issues related to these studies remained unresolved, identifying the problems and suggesting the diagnosis should be instrumental for future local policy research and education.

Third, the findings of decentralization's impacts on selected local policies also have important bearings on land use policy and property taxation. Because the size of the jurisdiction that controls land use may affect the stringency of related regulations, the allocation of land use controls across levels of government—counties and municipalities—is critical to development outcomes. Similarly, decisions on the governance structure and financing of local school expenditures will determine whether the property tax can remain a major source of local revenue in the United States. These research areas are important because improved understanding of how decentralization affects local governments and policies in different countries is necessary to formulate land policy and design local fiscal reforms.

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