

1. Introduction to the volume

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Size matters in the efficient delivery of local public services. Many countries around the world have vertical government structures that are perceived as inefficient because of their high level of jurisdictional fragmentation. A common response has been the implementation of jurisdictional consolidation programs, both forced and voluntary. The main declared objective of these programs has been to achieve economies of scale, thereby reducing production costs of local and regional public services. On the critics' side, it has been argued that policy strategies involving forced amalgamation can result in lost representation and accountability and that, therefore, other strategies need to be followed to address the issues raised by local government fragmentation.

The aim of this book is to review the fundamentals of the different strategies to address local government fragmentation and their observed consequences. The volume examines in depth the following questions. What are the drivers of local government fragmentation? Should we be really worried about economies of scale? Are there population thresholds to have in mind when choosing the optimal size of jurisdictions or devolution of powers? Does amalgamation of municipalities involve costs in terms of political representation and accountability? Is corruption related to jurisdiction size? What are the final results of both forced and unforced amalgamation? Are privatization and inter-municipal cooperation good alternatives to consolidation? The following chapters shed light on all of these questions.

Chapter 2, by Juan Luis Gómez-Reino and Jorge Martinez-Vazquez, addresses the identification of the main drivers of jurisdictional size. Colonial legacies, geography or ethnic and linguistic fragmentation, are likely to have contributed to heterogeneous levels of fragmentation. These factors could all be summarized in what is often termed the long shadow or the "dead hand" of history. Indeed, some countries may still have the same vertical structure of government that they had many decades ago. But there are also many countries that have changed their governmental

structures over the years. The authors try to find the common determinants that have led to those changes, in order to better understand if those common determinants can also be used to explain why other countries have changed so little. According to their econometric results, preferences for political accountability lead to smaller jurisdictional size and a larger number of governments. These results strongly suggest that accountability needs to be added to the list of critical dimensions in the theory of optimal jurisdictional size beyond the two arguments of economies of scale and heterogeneity of preferences emphasized in Oates's model. They also find strong evidence that a higher number of tiers of government leads to an overall higher level of jurisdictional fragmentation.

In chapter 3, Nicholas Charron, José Fernández-Albertos, and Victor Lapuente explore how differences in the size of the polity affects citizens' perceptions of political representation and the quality of services provided by their governments. Their findings show that the effects of size on political representation and quality of government might be slightly different from what the conventional literature suggests. The evidence in support of the idea that people in large polities become more alienated from the political process, or that the provision of public goods is improved as the size of the jurisdiction increases is very weak. However, size might have one big political consequence: it provides incentives to politicians to behave differently. In large polities, faced with a greater heterogeneity of preferences, policy-makers are more eager to target policies to please the demands of particular groups, and become less inclined to provide universal public goods.

The following two chapters examine the interactions between decentralization, fragmentation, and corruption.

In chapter 4, Michael A. Nelson works with a large cross-country data set of developing and developed countries to conclude that less fragmented municipal government structures are associated with more honest (less corrupt) behavior by government officials. The evidence is strongest for high-income countries. Corruption is measured in alternative ways, including perceived corruption by citizens and experienced corruption by business managers. Fragmentation is defined as the average size of a municipality, measured alternatively in terms of geographic area or population served. A similar conclusion is drawn for other bottom-tier governmental units, at the same level as municipalities or one tier below, although the results are less robust in a statistical sense. Overall, his findings would suggest that some caution should be exercised before adopting simply more fragmented local government structures as a strategy to promote good governance.

The contribution by Nadia Fiorino, Emma Galli, and Fabio Padovano

in chapter 5 analyzes the effect on corruption of the interaction of fragmentation with the level of fiscal decentralization. In particular, these authors pose three questions. Are countries characterized by more decentralized fiscal and spending powers likely to be less corrupt? Is a higher degree of government fragmentation a more effective way to deter corruption? Is there any evidence that these alternative ways to enhance government accountability reinforce each other? With this aim, they explore several indicators of government fragmentation and fiscal decentralization relying on a panel of 23 countries in the 1995–2007 time span. Taken separately, while various measures of government fragmentation do not seem to affect corruption in any significant way, fiscal decentralization measured as fiscal and spending autonomy does seem to reduce corruption. However, the latter effect is reinforced if fiscal decentralization is combined with a higher degree of government fragmentation at the local level. The results appear robust to different specifications of the empirical model. These results, therefore, seem to qualify the findings of Nelson in chapter 4 for just the effects of pure fragmentation on corruption levels. Fragmentation accompanied by fiscal decentralization would appear to have the beneficial effects of reducing corruption levels.

The following two chapters in the volume are focused on the issue of economies of scale in both capital intensive and labor intensive local public services. Economic theory suggests that the size of units of local government can have an important impact on the efficiency with which public services are provided. Conventional arguments about local government size assert that big is better, because larger units are able to capitalize on scale economies, though those economies may eventually turn negative as governments become plagued by bureaucratic congestion.

Germà Bel in chapter 6 aims to contribute to the better understanding of the cost conditions that may influence the patterns of production and also the governance modality in local public service delivery. The central issue is that some of these services are characterized by economies of scale, density and scope, which means that local jurisdiction size is, in some cases, smaller than the optimal scale of production. His study, focusing on capital intensive local public services, reviews the available empirical evidence to date for metropolitan transit services, airports, water supply, and solid waste collection. In particular, empirical studies of urban/metropolitan bus services coincide in their identification of economies of density for these transport companies, but their findings on the existence of economies of scale are somewhat mixed. The available empirical evidence for water services indicates that economies of scale exist and that they are significant; however, these economies tend to disappear when the supplier grows beyond a certain size. In contrast, the evidence regarding economies of

scope in this sector is much more limited and generally ambiguous in terms of its results, which prevents the drawing of any general conclusions. The empirical evidence from studies on solid waste collection points mainly to increasing returns to scale, although these are diluted with increasing output (or population), which typically occurs in the range between 20,000 and 50,000 inhabitants. The institutional environment is also found to matter. Increasing returns to scale are more readily found in environments where the average size of the municipality is small, and in which there are few experiences of inter-municipal cooperation or contracting out.

In chapter 7, Rhys Andrews examines the potential sources of economies of scale in the production of labor intensive public services. In particular, he focuses on England's local government experience estimating the relationship between district and school size and the average cost of producing educational output, by using a neoclassical cost function. To ensure that the estimates are not biased by omitted or unobserved variables, the empirical analysis uses panel data from English local educational authorities and incorporates numerous variables commonly utilized in education cost functions. The statistical estimates reveal a negative linear district size–costs relationship for primary education, though not so for secondary education. He also finds U-shaped relationships between school size and the costs of both primary and secondary education are observed.

In the international practice, governments have used a number of policy options to circumvent the added costs of smallness in municipal size. Consolidation or amalgamation of local government units can sometimes be the most efficient alternative. However, other institutional options, enabling intermediate solutions, have also been considered and often implemented. These include, *inter alia*, the creation of associations or inter-municipal consortia and the privatization of those services showing economies of scale in service delivery, such as water or transportation services. Usually, these other alternatives are easier to implement from a political standpoint.

Bernard Dafflon addresses in chapter 8 the question of jurisdictional amalgamation, extracting a number of important lessons from the Swiss experience. First, voluntary amalgamation is feasible, but it needs guidance and strong commitment from the higher government layer. Second, an explicit policy program is necessary, with the indication of the relevant gains and costs that are important for the canton and for the local governments. Third, there needs to be a concrete proposal with a tentative new territorial design after implementation of the policy program. Fourth, a large consultation of local actors about the proposal for amalgamation must be organized. Although the proposal can be made by the upper-government layer, the canton, local stakeholders need to take ownership

of the policy proposals since the final decision belongs to the local level. Fifth, cantonal technical and financial support for and during the process of amalgamation would be opportune. And sixth, financial incentives in the form of unconditional block grants should be made available to the amalgamated jurisdictions.

As pointed out above, local governments often set up inter-municipal consortia or associations to provide public services jointly, rather than individually. The main benefits of joint provision include the potential for improved cost-effectiveness arising from gains from economies of scale and the internalization of costs and/or benefits of provision, which could otherwise spill over inter-municipal borders and discourage the efficient provision of services. To shed further light on this issue, Luiz de Mello and Santiago Lago-Peñas in chapter 9 study inter-municipal consortia in Brazil and Spain, testing for the presence of scale and spillover effects in local government provision and how these and other factors work as determinants of the probability that local government will participate in inter-municipal associations in those countries. The empirical evidence suggests that in some cases smaller jurisdictions operate at suboptimal scale and are indeed more likely than their larger counterparts to participate in inter-municipal consortia. In the case of Brazil, governance arrangements between the municipalities and the state governments and/or private-sector providers are also associated with a higher probability of participation in inter-municipal consortia, suggesting the presence of “participation spillovers” among governance arrangements.

Brian Dollery, Michael Kortt, and Bligh Grant in chapter 10 focus on the same question of inter-municipal cooperation, but from a different perspective. Their point of departure is that local council collaboration through resource sharing and joint service provision aimed at capturing the advantages of economies of scale, but without the adverse democratic and economic effects of consolidation, represents the most attractive alternative for structural reform at the local government level, especially when it is deemed important to retain those activities within the public sphere. In their analysis these authors explore the foundations of shared services and what policies may be most effective to promote inter-municipal collaboration. While efforts aimed at constructing formal theoretical models of shared services have yet to prove fruitful, a good deal of knowledge on the suitability and economic performance of alternative kinds of services can be drawn from the existing empirical literature. However, much less is known about the public policies which can effectively stimulate the introduction of shared service arrangements. Dollery, Kortt, and Grant consider both policies aimed at removing obstacles to shared services and policies targeted at strengthening the “attractive” features of

shared services. While their preliminary analysis is suggestive, the authors acknowledge much more remains to be done, suggesting two avenues for further research. First, further empirical analyses of the efficacy of actual shared service policies could make a valuable contribution. Second, shared service provision could be decomposed into its component categories of production, management and policy. This would allow the investigation of which of these three dimensions should be tackled at the local level or regional level.

A third way to address the problem of inefficient scale, privatization and hybrid systems of local service delivery, is explored by Mildred Warner in chapter 11. In her view, solutions to the problem of suboptimal size require both inside and outside management strategies. Outside strategies tend to involve cooperation among local governments to gain scale and visibility to more effectively participate in the market, or it can involve a restructuring of governmental finance and service delivery competencies to better match the scale at which the service needs to be coordinated. This outside approach requires some level of vertical coordination and hierarchical power. Problems with market approaches to address the challenge of suboptimal government size occur at two ends of the spectrum. The smallest governments are least attractive and least able to play in market systems for public service delivery. This denies many small governments, especially in rural areas, the opportunity to effectively explore the benefits of service delivery innovation. At the metropolitan regional scale, the problem of suboptimal government size morphs into the problem of excessive jurisdictional fragmentation and the inability to coordinate and finance service delivery across the whole metropolitan region. Warner concludes that solutions to each of these problems lie in collaboration – whether voluntary or forced – to encourage service and resource sharing and promote a regional coordinated approach to service delivery.

In closing this introduction, we wish to express several acknowledgments and also offer a few comments on the origins of this volume. All the chapters were presented at the International Conference on the Challenge of Local Government Size: Theoretical Perspectives, International Experience, and Policy Reform at the Pazo de Mariñán, Galicia, Spain (29–30 September 2011). The Conference was organized by REDE (www.rede.uvigo.es) and the University of Vigo, and was sponsored by the provincial government of A Coruña, Galicia's regional government (Ministry of Presidency and Public Administration and Ministry of Education), the Spanish Institute of Fiscal Studies, and the European Regional Development Fund. We are especially indebted to Diego Calvo, Salvador Fernández-Moreda, Jose M. Labeaga, and Alfonso Rueda for their invaluable support. We are also very thankful to all other participants at

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It is our hope that this book will contribute to the deeper understanding of the often thorny issues surrounding local government fragmentation and the ideas here will help in the implementation of effective public policies.