
Introduction

The researchers have given serious effort to the study of cities and their economies since the early nineteenth century, von Thünen (1826) being one of the earliest. Since then research on cities has progressed dramatically, and most impressively during the past half century. This is in concordance with the rapid growth of what are the principal cities of the world economy today, fueled by the process of urbanization, increased rural to urban migration, the shift from an agricultural economy to one that is industrial, and the economic, social and political issues that have arisen in increasingly complex and sophisticated places for production and dwelling. Research has been focused on the locational issues that von Thünen raised in his *The Isolated City*, on sociological and demographic issues, governance and government, urban structures, competitiveness, strategic economic planning, and international relations among cities. More recently the interest in cities has grown as national and sub-national governments have been stressed by fiscal challenges and by ideological battles over the legitimacy of activities of these higher-level governments.

The methodology for studying these issues has evolved apace with the evolution of methodology throughout the social sciences. Although many rather early writers, such as von Thünen, Christaller and Lösch, and the latest approaches from the new economic geography used mathematics and geometry in their analysis, others from Marshall to inter-war writers, such as those of the Chicago School, and post World War II writers, such as Jacobs and Mumford up to Florida, have thought conceptually and presented their ideas in prose. Today both methodologies are alive and well and represented fully in both books and journal articles. In this *Handbook of Research Methods and Applications in Urban Economies* we have attempted to give the reader coverage of the full array of approaches to the study of cities. Some chapters are explicitly methodological in their subject while most are applications of one or another method. Regrettably, we much confess that we had wanted to include chapters on recent developments in the use of Global Information System (GIS) and regional mapping, relating cities to the region in which they are situated, spatial analysis for planning and development, imagining the urban future, and location theory, trade flows and the place of cities, but we were not successful in firming up commitments to these topics. Nonetheless, we are very pleased that we were able to include in one volume the wide

array of topics that are in the book; these topics include local governments, urban competitiveness, local economic growth, quality of life in cities, internal migration, strategic planning, urban sustainability, urban demographic growth and productive infrastructure. Another issue of the Handbook is its spatial perspective, in which cities from all around the world are analysed.

Part I consists of three chapters on methodology, per se. Ugalde and Ronda (Chapter 1) show how they used analysis of bureaucracies and their interaction with private sector actors in the areas of governability and planning with regard to hospitals and school building. During a period of 40 years one of the interesting aspects was that the same architects, planners, and firms were hired to do the work. They, of course, gained a great deal of proprietary knowledge of processes, agencies and bureaucrats and were able to exercise considerable influence in the initiatives. Kresl (Chapter 2) analyses approaches to the study of urban competitiveness: first, is the identification of determinants of urban competitiveness, and second, is a review of methods used to study urban competitiveness – benchmarking, structural and empirical; Kresl then demonstrates the approach he has employed, using multiple regression and discriminant techniques to analyse data for a set of US cities, to discover important aspects of their urban competitiveness. He is able to make valid observations about the changes that have occurred during a period of three decades, specifically, the rise and fall of individual cities and regions and of hard and soft determinants. In Chapter 3, van den Berg discusses how his European Institute for Comparative Urban Research (Euricur) has studied how research on European cities has been affected by comparability, diversity, utility of information and willingness to cooperate; His is the methodology of case studies and interviews with principal actors. Euricur has applied this methodology to studies of several sets of cities primarily throughout Europe. They have studied specific issues such as the role of sports and of governance in city marketing. They have also worked with private companies, including a project to study the health of Rotterdam residents that led to the founding of Partners or Health Cities.

Part II presents us with four examinations of how the analysis of urban economies differs in areas of the world economy. Ni, Li and Li (Chapter 4) examine the issue of well-being and how it is spatially distributed among Chinese cities. Once well-being has been calculated for the cities, they then use a mathematical model for determination of the factors that influence the well-being of urban residents. Their approach is quite sophisticated and in the end they use it to discuss issues of spatial planning and strategic development. The objective of this study is that of showing how public

policy can enhance well-being of a city's residents. Tremblay and Battaglia (Chapter 5) give us an interesting comparison of doing research on cities in one North American city, Montreal, and one European city, contrasting the policy approaches of Barcelona's *22@ District* with Montreal's *Innovation District* in a comparative analysis of two efforts at central city regeneration. This issue of innovation districts has become very important in recent years, and this study gives us many valuable insights into processes of governance and relations among local actors. Their conclusion is that Montreal is creating an innovation cluster while Barcelona is putting in place a functional technopole. Both models are instructive to other city planners.

The tendency of urbanization in Latin American cities to increase social distances and inequality is explored by Pinto da Cunha (Chapter 6). The author focuses on two important aspects: the obsolescence of the dichotomy between rural and urban, and demographic and economic de-concentration in large Latin American metropolitan areas. The availability of comparable data for several Latin American countries has always been problematic, but recent innovations in GIS, national censuses databases, and geo-processing have greatly facilitated continent-wide empirical studies. Unfortunately, urban policy makers and planners are still hindered by lack of availability of good data and time series. Development of this data remains one of the great problems confronting researchers on urban development and policy in Latin America.

This paucity of good data is discussed by Duminy, Watson and Odendaal (Chapter 7) with regard to doing research on African cities. However, weak urban governance and dysfunctional civil society make the researcher's and the planner's task all the more difficult. One of the consequences of the weak institutional infrastructure is the difficulty in generation and dissemination of data. The authors find that one way to circumvent this problem is to focus on case studies in which the emphasis is on relations among actors and on urban contexts. These qualitative methods can enable researchers to gain a narrowly focused understanding of processes of change in specific urban settings.

In Part III we have three examinations of the way in which a city relates to a larger context. Fry (Chapter 8) takes the grandest view, putting the city in the international or global context. As urbanization progresses throughout the globe, cities have become increasingly significant economically. Fry gives us a cogent discussion of the way that United States (US) municipalities have engaged in 'foreign affairs' as a strategy to manage their international connections in 'globally contestable' markets. He argues the need for increased recognition of the importance of cities as economic actors and for new structures among the various levels of

government in a nation. Salone (Chapter 9) applies the globalization and multi-level governance aspects to the European context, with international organizations such as the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU) playing a larger role than is the case with the US. The author raises the question of territorial scale, and the relationship between globalization and localization of economic activity and decision-making. The rising role of urban regions has promoted spatial polycentric patterns throughout the EU. Salone discusses issues such as political legitimacy, financial decentralization and decentralization of authority as they have developed during the past half-century. Finally, Trullén, Boix and Galletto (Chapter 10) give us an analysis of the spatial concentration of population and economic activity at different geographic scales – city, metropolitan area, urban region, and mega-region – and how some concepts, like agglomeration economies, and variables, such as daily mobility, can be used in those geographic scales. Then the authors use their findings to position Barcelona in a metropolitan, regional and global context. The authors conclude that the nature of increasing returns has become increasingly complex, and that network economies must now be taken into account. Finally, they caution us that the definitions of the various urban scales are as yet rather fluid and subjectively determined.

The subject of the chapters in Part IV is that of planning for the future of an urban economy. Kresl (Chapter 11) develops the processes involved in strategic-economic planning, using US Metropolitan Statistical Areas and similar territorial spaces for his analysis. Others have focused on different definitions of the city region – the build city, the commuting city, and ‘Greater X’ (in the case of the United Kingdom) among others. This primary concern is that of capturing the economic activity that is based on the city. In his discussion, Kresl raises issues such as path dependency, the time horizon, the value of clusters as a planning device, the importance of urban amenities, and the relevance of size. He then covers the essential aspects of the planning process and finishes with the way in which a city can plan for its future. This latter topic is the subject of McDonald’s chapter (Chapter 12), in which he focuses primarily on the city of Chicago. He raises the issue of the growth of an urban area and how it is driven by immigration. McDonald stresses the importance of educational attainment, as well as factors such as weather, metropolitan size, ‘right-to-work’ laws and transportation facilities. Another reality of urban areas is the relationship between the center city and suburban areas, and the challenge of retaining the vitality of the former in face of the growth of the latter. Looking to the future of Chicago, MacDonald sees slow growth, and no longer the dramatic expansion of the 1990s. His policy

suggestion is concentrated on further immigration and investment in the city's impressive but somewhat congested transportation infrastructure.

In Chapter 13, Lezama treats planning for the consequences of a primary feature of the recent growth of large cities of Mexico – environmental pollution. Mexico City has become a genuine mega-city, and one of the problems for the city is the lack in Mexico of administrative structures that are designed to deal with the problems and planning of such a conurbation. The expansion of road traffic has gone on with out any control being exercised. Given the nature of the data available, it is not even possible to get a clear understanding of the trends in the resulting air pollution. Given the segmented nature of regulatory agencies, air pollution is rarely related to other aspects such as various socio-economic processes and the natural world. Lezama closes his chapter with suggestions as to how the administrative structures could be re-designed so as to be able to more effectively confront the environmental challenges that confront Mexico's largest cities.

In Part V, megacities and their demographic growth is the subject of Sobrino's first chapter (Chapter 14). Ninety per cent of the world population increase during the twentieth century occurred in less developed countries, and this is anticipated to be repeated in the twenty-first century. This has been accompanied by concentration in large cities and dominant urban regions, regional disparities, problems with governance, and complex spatial structures of central city and suburbs. In recent years this process has brought the rise of cities such as Mexico City, São Paulo, Bombay, Delhi and Calcutta into the ranks of the ten most populous cities in the world – megacities. Along with the rise of these megacities has come the depopulation of rural areas, as people comprehend the economic possibilities of an urban life. Managing the mix of positive and negative consequences of large city growth will be one of the most challenging tasks of the rest of this century.

Lever (Chapter 15) relates the milieu of the city and the enterprise – the instruments available to local decision-makers and the needs of the enterprise – and the impact that this relationship can have on the emergence of economic clusters. The milieu of the city has spatial, economic, cultural, information, and governance aspects, and Lever gives us a discussion of each of them. These aspects were initially examined from the standpoint of transportation costs, but this quickly gave way to a more behavioral approach that was focused on knowledge and creativity – the innovative milieu. Finally, recognition was given to the quality of local government and effectiveness in policy-making. Ultimately, four issues have come to the fore: the global nature of economic activity, the energy/waste balance of cities, the exposure of cities to financial and other risk,

and the emergence of the megacities of the emerging countries. Lever argues that these issues will dominate future research in this area.

In his second contribution (Chapter 16), Sobrino looks at the internal migration in Mexico and how these flows can be differentiated by the sex, age, educational level and income of the migrants. Globally, only certain sorts of countries attract international migrants – the so-called ‘lands of recent settlement’, for example – and internal migration also varies dramatically among countries – from 2.9 migrants per thousand inhabitants in the Philippines to 25.2 for Canada. Both movements are motivated by perceptions of economic benefit as well as the administrative practices of the countries involved. To the extent that the economic benefits are realized we have to see this movement as desirable; we must also recognize the benefits of migration to the diversity of populations and the beneficial impact this has on urban competitiveness.

Planning for urban infrastructure initiatives is the subject of Chapter 17 by van Wee, Annema and Priemus. They begin with an overview of methods used to determine infrastructure needs, then they examine models used to give input to these decisions, and finally they discuss the challenges that the future will bring and the need to evaluate initiatives that have been undertaken. Data is utilized for 20 European nations. They review the benefits and problems with the cost-benefit analysis (CBA) that is utilized so widely. The principal strength of CBA is the fact that the impacts can be presented in monetary terms; however, there are many non-quantifiable aspects, or pecuniary costs, that cannot be included in the evaluation. Cost over-runs reduce the value of CBA, distribution effects are ignored, and wealthy individuals and districts have more influence than to their poorer counterparts. In spite of these weaknesses, CBA remains widely utilized.

Orihuela (Chapter 18) studies the existence and functioning of local public-private relationships in Mexican cities. She covers theoretical aspects, especially from the regime theory, of the role of cities, their governance and the role of public-private relationships for economy development, with the aspects of governance receiving considerable attention. These relationships can take the forms of joint ventures, partnerships, seller-buyer and leader-follower with two sectors being involved in each; each is also suitable for a specific situation as indicated by regime theory. Orihuela then applies this theory to two Mexican intermediate cities: Toluca and León. These two cities moved between pro-growth, growth-management and social-reform regimes, in accordance with developments in local political and economic contexts. Of critical importance was change in the governing political party in the local authority. In the growth regimes business interests came to dominate, and in the social-reform regime other community entities moved into prominence. The

overall object must, of course, be that of combining economic growth with quality of life for the population.

The final chapter (Chapter 19) is by Kourtit, Nijkamp and Arribas-Bel who examine the impact of foreign migrants on an economy's economic growth. They utilize a conceptual and operational business performance model and apply it to Super-Efficient Data Envelopment Analysis to generate Self-Organizing Maps that present visually the differences in performance of Moroccan immigrant entrepreneurs on the four largest Dutch cities. The authors then examine the reasons for these performance differences, highlighting their investment in human capital, motivation and youth, and conclude that their ethnicity is less of a factor. A positive consequence of this international migration is the impact it has on increasing the diversity of the population, and diversity has a positive impact on economic performance. One element is the new ways in which immigrant entrepreneurs operate and the challenge they pose to local counterparts to increase their own performance.

We discussed the first idea of this Handbook at the end of 2010, in a lobby of a hotel, located in Mexico City, just after a very good dinner. Our first approach was more limited than this final version. We would like to give our thanks to all the contributors for their confidence and support to this project and for their chapter(s).

REFERENCE

von Thünen, J.H. (2009), *The Isolated City*, New York: Palgrave Macmillan.