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URBAN AND REGIONAL ECONOMICS

Issues in Urban Economics

**Harvey S. Perloff and
Lowdon Wingo, Jr.**

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PREFACE

An infant among the traditional interests of economists, urban economics has a special need to identify what is germane to its special involvement with the city. Thus, the mission of this volume is to establish benchmarks at the outer limits of what is known in the hope that scholars will be stimulated to venture beyond them.

The book climaxes eight years of effort by the Committee on Urban Economics of Resources for the Future, Inc., to advance the field of urban economics. The Committee consists of university scholars and researchers in economics and the other social sciences who have been concerned with urban problems for many years. On one level it has sought to provide intellectual leadership for the more rapid development of the field; on another it has channeled funds for fellowships, research, conferences, and various overhead activities to build up the necessary "infrastructure." Moved by a sense of timeliness, the Committee has endeavored in this volume to capture the state of urban economics as it existed in 1967, but even more, to propagate the excitement of what is to be discovered in the coming years that can change the nature of cities. And for the great majority of us the city is the primal environmental fact of our lives.

Members of the Committee, joined by other interested scholars, prepared the papers in this volume. They were first presented at a conference held in Washington, D.C., in January 1967, to elicit critical review of the authors' appraisals of their sectors of the field and to introduce the viewpoints of other scholars. In our estimation, the papers, along with the viewpoints of their discussants, have provided an uncommonly clear view of this field and, more importantly, of its scholarly potential.

This book should be of particular interest not only to undergraduate and graduate students of economics, but also to those in other social sciences who are exploring for the first time the economic dimensions of urban growth and change. With this in mind, the volume is designed to provide (1) a broad overview of the state of the arts, in its introduction; (2) a more intensive description of the key areas of urban economics, in the papers and comments; and (3) clear paths into the literature that has accumulated in the areas, in the form of selected readings appended to each paper.

HARVEY S. PERLOFF and LOWDON WINGO, JR.

ISSUES IN URBAN ECONOMICS

CONTENTS

Preface	vii
Introduction	1
<i>Harvey S. Perloff and Lowdon Wingo, Jr.</i>	

PART I. THE URBAN COMMUNITY WITHIN THE NATIONAL ECONOMY

Internal and External Factors in the Development of Urban Economies	43
<i>Wilbur R. Thompson</i>	
Appendix: Toward an Econometric Model of Urban Economic Development	63
<i>John M. Mattila and Wilbur R. Thompson</i>	
The Evolving System of Cities in the United States: Urbanization and Economic Development	81
<i>Eric E. Lampard</i>	
The Uses and Development of Regional Projections	141
<i>Sidney Sonenblum</i>	
The Changing Profile of Our Urban Human Resources	187
<i>George J. Stolnitz</i>	
Discussion of Part I	229
<i>Harold J. Barnett</i>	

PART II. INTRAMETROPOLITAN DEVELOPMENT

The Evolving Form and Organization of the Metropolis	237
<i>Edgar M. Hoover</i>	
Urban Residential Land and Housing Markets	285
<i>Richard F. Muth</i>	
Poverty in the Cities	335
<i>Oscar A. Ornati</i>	
Quantitative Models of Urban Development: Their Role in Metropolitan Policy-Making	363
<i>Britton Harris</i>	

CONTENTS

Discussion of Part II	413
<i>Donald J. Bogue and Anthony Downs</i>	
Rebuttal by <i>Britton Harris</i>	
PART III. THE URBAN PUBLIC ECONOMY	
Federal, State, and Local Finance in a Metropolitan Context	435
<i>Dick Netzer</i>	
The Supply of Urban Public Services	477
<i>Werner Z. Hirsch</i>	
The Demand for Urban Public Services	527
<i>Julius Margolis</i>	
Discussion of Part III	567
<i>Richard A. Musgrave</i>	
PART IV. POLICY ISSUES	
Public Policy for Urban America	577
<i>Alan K. Campbell and Jesse Burkhead</i>	
Subject Index	651
Name Index	663

INTRODUCTION

As was probably the case with other special fields in economics, urban economics became a focus of interest among economists as a result of rising policy issues that were not only of great practical significance but were intellectually intriguing. Important among them have been the following problem areas:

a) *The economic growth and stagnation of cities.* After World War II the lagging growth and severe unemployment that afflicted a number of major urban centers as well as many smaller cities within depressed regions brought the problems of urban economic growth to the attention of the whole nation. General economic studies of such major cities as New York, St. Louis, Pittsburgh, and Boston were sponsored, and economists were brought in to tackle the analyses. Simultaneously, many of the 14,000 "area development" agencies identified by the Committee for Economic Development in the late fifties began to undertake more limited studies of area problems. Thus, by the early sixties there was vigorous activity among economists interested in the sub-national economy, and this was given a further spur by such federal agencies as the Area Redevelopment Administration and the Housing and Home Finance Agency in sponsoring local economic studies as a pre-condition for federal aid.

b) *Local impact of national policies and expenditures.* Several federal government agencies, as well as individual researchers, became disturbed over possible distortions in the subnational economy that could be created inadvertently in carrying out massive federal programs. Clearly such programs had the capability of radically changing growth trends and the welfare dimensions of local areas. The Department of Defense in its procurement plans found it necessary to calculate the impacts of its vast expenditures on regions and local communities. In parallel fashion, the National Aeronautics and Space Administration combined with its responsibilities for outer space a concern for the consequences of its policies on "inner space," which it expressed in a significant program of research grants to universities across the nation to study the regional impacts of the space program.

c) *Transportation.* The exodus to the suburbs and the mounting congestion of the inner city generated pressures to build giant transpor-

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INTRODUCTION

tation networks in and around the major metropolitan regions. The Bureau of Public Roads joined with state and local agencies to carry out costly general transportation studies in a number of large cities, including New York, Philadelphia, Chicago, Detroit, Pittsburgh, and San Francisco. The many factors and interrelationships involved—social, economic, technical—focused interest on large-scale mathematical models for “conditional” prediction and for “experiments on paper” with whole transportation systems. The special skills of the economist in such matters were indispensable. Their contributions to such efforts as the RAND Transportation Study and the Penn-Jersey and Chicago Area Transportation studies made the mathematical model a significant planning and policy tool.

d) *Public services and urban development policy.* A number of problems formerly treated in a functional context alone became grist for the economic analysis of urban issues. Programs to rehabilitate urban physical capital focused interest on the land, housing, and general real estate markets conceived in a metropolitan framework. Problems of educational equality generated new attention and interest in urban investment in human beings. Urban poverty issues brought about a restatement of conventional thought about urban income distribution and the labor market. The problems of public investment decisions generated new interest in the applicability of planning-programming-budgeting systems (PPBS) to rationalize policy-making and financial behavior of local governments. The pressure of rising demands for urban public services against the rigid financial systems of state and local governments revived interest in state and local finance. The Advisory Commission on Intergovernmental Relations has taken leadership in re-examining the needs and problems posed by the inherited system of financial relations among governmental units. In the academic world, The Brookings Institution, seizing the opportunity provided by a large-size project on public finance, has in several recent works advanced the knowledge and level of analysis of the local public economy.

e) These policy interests have received valuable support from recent work on *data problems and methodology*. Regional accounts, information systems, and data banks have been put forward as means to improve the data base for the analysis of policy issues. In 1959 Resources for the Future launched its program to promote the development of regional accounts. Guided by a committee under the leadership of Werner Hirsch, its purpose was to provide a sounder base of information for urban decision-making. Work on input-output analysis in its application to subnational economies has been pushed by Leontief and others as a related information system. Data banks to exploit computer

technology have been developed with the aid of federal support and have sparked the interest of urban planners and administrators. Economists have been stimulated to work on substantively oriented information systems as a reaction to the indiscriminate storage of information sometimes characterized as GIGO—"garbage in, garbage out." At the federal level, a key regional analysis unit set up in the Department of Commerce is but one of several federal information efforts now in operation. Finally, important methodological advances in regional analysis have been produced by the regional science program directed by Walter Isard.

A Note on the Parochial Nature of this Volume

The contributions in this volume come out of the American urban experience. The parameters they incorporate stem from our market institutions and political processes. The empirical analyses are fed by the uniquely rich data sources of our public and private agencies. The fact is that most of what we do know about the economies of cities has proceeded from the study of the cities of the United States, and it has been a general principle of this volume to focus on what we know best.

This caution is not to be interpreted as reflecting a purely parochial interest. While the inputs to the papers flowed from this country's particular experience, knowledge about cities in other parts of the world and in other stages of development has been indirectly advanced. For example, suggestions for methodological procedure abound, and many of the conclusions reached offer good working hypotheses for the study of cities in other societies. Elements of theory emerge, the generality of which far transcends our national case. Scholars and researchers concerned with urban development in the less advanced as well as in the modern industrial nations should be able to profit from our state of the arts in urban economics, at least to the extent that they will be able to shortcut the tortuous path we have carved out to get just this far. Furthermore, it should be recorded here that numerous studies are now underway dealing with the economies of cities in other societies. It is likely that the rapidly expanding interest and the growth of knowledge on the American scene will stimulate and inform parallel developments elsewhere.

Classic Economic Questions

As economists began to focus attention on the city, it became evident that the classic problems of economics were at the core of the crucial urban problems, even though the city gave the analytical issues as well as the policy issues a somewhat unique character. Behind the question

INTRODUCTION

of how a particular city might overcome a lag in economic growth and whether it should provide subsidies to attract industries, or how to build a metropolitan-wide transportation network, or whether to spend billions of public dollars to rebuild the central business district, is the basic question of *economic efficiency*. The city has become the production "shell" within which output efficiency is or is not to be achieved; the cost record of a highly efficient plant can be undone by a clogging of the movement of inputs and outputs and, say, inadequate water for cooling purposes. Consideration of *equity* or *distributive justice* are at the heart of the great issues of racial discrimination in jobs and housing markets. In the struggle for equity, modern urbanization has opened up new battlefronts; the relatively simple issues of tax categories and tax rates have given way to the far more complex problems of relative service burdens and tax jurisdictions in our segregated metropolitan regions. Issues of *welfare and quality of life*, which have begun to loom large in economics in recent years, are particularly dominant and particularly tough on the urban scene. Poverty in the city seems to be rigidly institutionalized. The divergence between private costs and benefits on one side, and social costs and benefits on the other, take recognizable forms in the polluted atmosphere and water of the city and in the housing market of the slum.

Thus, it has become evident that the mainstream of economic thought could be advantageously applied to the problems of the urban community and, in turn, that urban economics could contribute to the content and tools of the economic discipline.

Three Major Categories

The analytical aspects of those current urban policy issues which involve considerations of efficiency, equity, or welfare cluster more or less naturally into three large interrelated categories:

1. *The external relations of the urban community*; including the relation of the city to the nation as a whole of which the city is, after all, a subsystem; to companion urban units in the highly articulated "system of cities"; and to its hinterland, for which it serves nodal functions.

2. *The internal relations among its parts, or the intrametropolitan dimension*. The metropolitan area basically encompasses a labor market and a dense, interrelated communications system. As long as the production, consumption, and family-living functions have to take place in space, the handling of the friction of space and the operation of land, plant, and housing markets will continue to be significant subjects, not only for public policy but for study—for some, the heart of urban economics.

3. *The public economy of the urban community* and its intergovernmental dimensions. The demands for public services and activities have increased greatly as industries and people have clustered together, so that the efficiency, adequacy, and equity with which such services are provided have an ever increasing impact on the lives of the people, while simultaneously the lack of coincidence between the local governmental jurisdictions and the economic region and the plethora of local units which govern the metropolis vastly complicate matters and raise many difficult issues.

I. THE URBAN COMMUNITY WITHIN THE NATIONAL ECONOMY

Every significant feature of national socioeconomic change is reflected in urban change, but differentially as among the various communities. The size, functions, and specializations, and the city's linkages with its hinterland and with other cities would seem to have an influence on its development and on the jobs and income it provides for its residents. But what is the nature of this influence, and what determines the special character of any city's growth or of the growth of all the cities taken together?

Economists struggling with these questions can reach back into an extensive literature. One line of development can be traced back through the intellectual lineage of the German economic geographers. Johann Heinrich von Thünen's early nineteenth century analysis of the economic organization of the city's agricultural hinterland related access (or transportation costs) to rents, and rent to factor proportions in production, and so paved the way to an understanding of how the market structures the city. From the Thünen analysis stemmed two other branches—location and central-place theory. The partial equilibrium theory of industrial plant location was given its significant early formulation in the work of Alfred Weber (1909)—later elaborated into a more general theory of the shaping of the space economy by Walter Isard, who synthesized location theory and international trade theory. Central-place theory was first formulated in a meaningful way by Walter Christaller (1933) and greatly broadened and elaborated by August Lösch (1940–44). In recent years, central-place theory has been extended and applied by Brian Berry and others to a host of questions concerned with the spatial distribution of economic activities.

Another line of development evolved from the concept of the economic base with its implicit multiplier concept. Homer Hoyt pioneered the use of this concept as early as 1937. While the economic base theory has been the target of extensive criticism, it has retained a re-

INTRODUCTION

markable durability and in one version or another is central to most urban growth projections. The debate centering on economic base theory has been a rich source of conceptualization about the nature of the relation of urban communities to the national economy or to the rest of the world.

Another line of work has sought to clarify the patterns of urban change within an integrated national economy by examining and explaining the patterns of regional deviations from the national average in rates of economic growth and in level, distribution, and stability of income. These studies, as John Meyer has traced through in his survey of regional economics,¹ have applied to the urban-regional field the well-established tradition of combining historical and economic explanations and reformulating tentative hypotheses as experience and data accumulate. Such an approach has characterized some of the major economic studies of recent decades, including the New York, Pittsburgh, and Upper Midwest economic studies, as well as the studies of Hanna, Borts, Fuchs, Dunn, and Sonenblum. In a similar tradition of hypothesis-testing have been the studies of the Duncans, Sjaastad, Lowry, Kusnets, Thomas, and Lee, which are concerned with human ecology and migration within the context of urban structure and national-urban change. Among other consequences, these studies have brought human resources into the urban economics picture in a significant manner and opened the way to a fruitful new line of research.

The Performance of Local Economies in a National Setting

In his recent path-breaking book,² Wilbur Thompson brought these various strands together and, in turn, linked them with the mainstream economic issues of income, employment, and growth. In his contribution to the present volume, Thompson takes up where his *Preface* left off, contending that the issues of national-to-urban change are indeed central to the field of urban economics. "Our charge in urban-regional economics," he suggests, "is to determine why some urban areas are richer or more egalitarian or more unstable—or all three (as in the case of Flint, Michigan). Urban-regional economics, freed in the beginning from explaining the general state of the national economy, becomes the study of variations within the system of cities. Product and income may be measured at the national level, but it is produced

¹ John R. Meyer, "Regional Economics: A Survey," *American Economic Review*, Vol. 53 (March 1963).

² *A Preface to Urban Economics* (The Johns Hopkins Press, for Resources for the Future, 1965).

at the local level more or less efficiently, depending on the form and functioning of our cities.”

While many factors influence the performance of a local economy, the industrial structure dominates the rest. As Thompson puts it, “Tell me your industries and I will tell your (immediate) fortune.” “How could a highly specialized economy,” he asks, “fail to reflect in its level, distribution, and stability of income and growth rates its distinctive industry mix?” Thompson presents a graphic model which describes how these welfare characteristics emerge from the industrial structure of an urban community. Here the concept of industrial structure goes beyond a mere collection of industry categories to include even more basic characteristics: whether the local plants are old or modern, whether they produce products that are income elastic or not, whether they exert oligopolistic controls, whether they require a broad or narrow range of worker skills.

Local industrial characteristics, Thompson argues, shape the local income pattern not only directly, but also indirectly by influencing the rate of growth of the local economy. If a greater-than-average increase in the demand for local labor raises wages and provides opportunities for overtime earnings and part-time jobs, it will also attract workers from outside. Classical economic theory would predict an increase in the supply of labor in response to the attraction of the prosperous growing community. The seeming paradox of poverty amidst plenty in the booming locality, says Thompson, is quite in conformance with classical theory. Poor people are drawn to rich communities. Thus, measuring over-all averages, growth does not necessarily make a locality richer, only bigger. But this formulation, one should note, may well hide some significant facts. The status of the new migrants is more important than the averages. Even if their income is sufficiently below the income of the older residents to reduce the average family income below the pre-migration levels in a given locality, still each of the family units will often tend to be better off than before, without reducing the incomes of the older residents. Also, the large size that results from the growth of cities that are attracting migrants tends to reduce the incidence of poverty, as Ornati points out in another paper in this volume. The really nasty poverty is in the smaller, non-growing places.

Whatever its impact on *average* incomes, urban growth—that is, growth in population numbers and volume of activities—is itself an attraction for many. As a matter of fact, the beginnings of modern urban economics can be traced back to the concern with the base of