URBAN STRUCTURE AND THE ŁABOUR MARKET

Worker Mobility, Commuting, and Underemployment in Cities

WAYNE SIMPSON



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PREFACE

As a young graduate student searching for meaningful issues to study, I was fascinated by the role that cities—especially great cities—play in modern civilization. This fascination led me to a great city. London, and the urban economics programme at the London School of Economics for four years. Those are years that I will always remember fondly and which engendered both a Ph.D. dissertation and a lasting interest in urban economics and urban labour markets. This line of enquiry has often been solitary not only because interest in urban economics has declined since its peak in the 1970s but also because I have encountered very few researchers specializing in urban labour market analysis. Reflection has always reaffirmed my initial judgement that cities are about work as well as play (consumption) and that understanding the urban economy meant understanding its labour market. I finally decided that I should attempt to assemble the ideas and research that had grown out of my Ph.D. manuscript, some of which have appeared in articles in various journals. The result is a completely reworked, updated and, I believe, much more thoughtful analysis of the urban labour market that is intended to be of interest to urban and labour economists, geographers, planners, policy-makers, and others interested in urban and labour studies.

This book is written to appeal not only to economists but also to others with a serious interest in urban studies and labour markets. For this reason, I have confined the more technical and mathematical treatment of the analysis to specific asterisked subsections in Chapters 2–6. Those who wish to avoid a mathematical treatment may skip these subsections and, I hope, lose very little of the rigour of the argument. Others, especially economists, inclined toward a mathematical treatment, will find a succinct presentation of the ideas in those subsections. The book is aimed at the level of senior undergraduate and graduate students as well as researchers and teachers. The mathematical sections may be understood by anyone with intermediate calculus or the equivalent of an undergraduate course in mathematics for economists.

I would like to thank once again my graduate supervisors, Christopher Foster and Ray Richardson, for their guidance during the formation of this research programme and the writing of my Ph.D.

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dissertation at the LSE. Christopher Foster told me in 1977 that there was a book in my dissertation work and I am belatedly acknowledging his good judgement. I owe a special debt of gratitude to Norm Cameron of the University of Manitoba who hired me to teach labour economics when academic jobs were scarce and gave me the opportunity to pursue this research over the past eleven years. I would also like to thank William Watson of McGill University and two anonymous referees for reading the manuscript and providing useful comments to improve the exposition, and Anne van der Veen of the University of Twente whose collaboration over the past year has undoubtedly influenced and stimulated my revision of the first draft of the manuscript.

Finally, I must thank my wife, Jeannine, who shared those years in London with me, bore our three children, and created the happy family environment in which long-term projects such as this one are sustained. I hope that we will share many more of the world's great cities together.

W.S.

Winnipeg, Canada September 1990

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INTRODUCTION

URBAN economics is only three decades old. It developed from concerns about economic problems in urban areas, including 'poverty, slums, pollution, segregation, suburban sprawl, and the financing of local public services' (Mills, 1972a: 1). These concerns were translated into public funding for urban research and urban policy initiatives, which in turn attracted economists to apply existing theories and to develop new theories with specific urban applications. Textbooks were written; courses were developed and often integrated with urban and regional planning programmes; journals specializing in urban economics were created; and urban economics became a respectable subdiscipline within economics.

Urban economics and urban problems may seem less prominent today than they did then, but they are no less serious. Leach (1985) documents the rise and fall of urban policy during the 1970s in the United States, Canada, and Australia and Higgins et al. (1983) tell a similar story for the United Kingdom. The authors of both books see the demise of urban policy as unfortunate, since the initial problems remain important, largely unresolved, and likely to recapture public attention in the future. Public attention and funding has shifted to other issues but will return to urban problems eventually. Urban economics must therefore continue to develop if solutions to these enduring urban problems are to be found.

Labour economics is a much older discipline than urban economics, but one that has been revolutionized in the last three decades. This revolution reflects the widespread application of microeconomic theory to the study of the labour market. It also reflects the development of new microeconomic concepts particularly relevant to the labour market, including human capital theory and the economics of information. Regardless of the techniques used, labour economics remains an important part of social and economic thought, and concern with problems of unemployment, underemployment, and earnings inequality ensures a prominent place for labour economics in future scholarship.

This book combines the study of urban and labour economics. It studies labour markets from a unique urban perspective. It is not a complete theory of the labour market, since there are many textbooks for that purpose (Addison and Siebert, 1979; Hammermesh and Rees, 1984; Fleisher and Kniesner, 1984; Wachtel, 1984), nor is it a complete treatment of urban economics in the usual sense (Richardson, 1971; Mills, 1972a; Evans, 1984; Henderson, 1985). It is instead a theory of the labour market that applies to the special character of urban areas and urban problems. It is thereby intended to be a contribution to the study of both urban economics and labour economics of interest to students of urban and labour market problems.

1.1 DEFINING URBAN ECONOMIC PROBLEMS

Most people live and work in cities, particularly in developed economies. Each city may be conceived to be a small, open economy with almost the full spectrum of economic activities and problems—public and private resource allocation, income distribution, unemployment and underemployment, inflation, and balance of payments. Monetary policy, agriculture, and mining are not direct urban concerns, but there is little else that is not.

Since the urban economy is almost a microcosm of the national economy, understanding its problems requires the application of many economic subdisciplines including economic growth and development, welfare economics, transportation, public finance, environmental economics, regional economics, and labour economics. During the 1960s and 1970s, when urban economic problems were in the limelight, these subdisciplines were often used to identify urban problems and suggest policies. This exercise may have been useful but it did not usually identify uniquely urban problems, since the urban case was simply treated as an application of another subdiscipline.

The application of labour economics to the study of the urban economy provides a good example. Many inner cities were, and still are, deteriorating at an alarming rate. This deterioration, and the human misery that it implied, was a focus for the War on Poverty programme started in 1964 in the United States. The American economy, despite low unemployment rates by today's standards, contained spatially concentrated areas with very high rates of unemployment and underemployment, poverty, and general economic despair among residents. The standard tools of labour economics plus the burgeoning

theory of segmented labour markets (Cain, 1976; Harrison and Sum, 1979) were used to analyse these problems, but this analysis did not help us to understand why these problems were spatially concentrated within cities nor what urban planners and urban politicians could be expected to do to alleviate them. The problems seemed to have no uniquely urban characteristics; they simply occurred in cities.

Sifting through economic theory did provide the basis for a subdiscipline called urban economics, however. This basis was spatial economics. Economies of spatial agglomeration were used to provide a theory of the formation and growth of urban areas and the development of an urban hierarchy within regions and nations. The economics of residential and industrial location was developed to provide a theory of the urban land market and of the spatial organization of economic activity within the city. A glance at a recent urban economics text, such as Evans (1984) or Henderson (1985), or at articles in the *Journal of Urban Economics* indicates that spatial economic theory is now commonly defined to be the core of urban economics.

Spatial economics provides a unique urban view of the spatial concentration of high rates of unemployment and underemployment, poverty, and general economic despair among residents. Residential location explains the spatial segmentation of families within the city according to income and preferences (Alonso, 1964). Poor families, beset by chronic unemployment and underemployment, tend to be confined to older inner-city areas by the competition for land and the lack of affordable housing elsewhere and by discrimination in the housing market (Kain, 1975). This process may in turn be reinforced by zoning arising from externalities in land pricing and from political considerations.

In this view labour markets generate poverty and poor residents are assigned by the urban land market to older inner-city areas. Labour economics is non-spatial and provides no insight into the urban problem other than to explain poverty, which occurs in rural areas as well. The analysis suggests a general policy response to deal with underemployment and poverty, such as aggregate demand stimulus (Cheshire, 1979, 1981).

Some urban scholars have argued, however, that urban structure—the spatial distribution of people and jobs within the city—affects labour market performance. They observe that the poor lack employment opportunities near by as employment growth is concentrated in suburban areas far from the inner city. This separation of the under-

city workers were unlikely to search for vacant jobs in suburban areas despite the lack of employment opportunities in the inner city and despite wages for suburban jobs which more than compensated for the additional commuting costs from the inner city to the suburbs. In other words, neither inadequate labour demand nor transportation cost appears to account for inner-city unemployment and underemployment. As a result, spatial immobility of inner-city workers requires further investigation.

These issues have important policy implications. A recent example is provided by Leonard (1987), who notes that many courts have placed the burden of racial integration on employers. If races are residentially segregated and if workers are not mobile, then the supply of labour to many employers is not racially mixed. Employers may not discriminate and the labour force may still be racially segregated. Yet the cause of labour-force segregation is not employment discrimination alone but residential segregation and worker immobility as well. Effective policy to provide equal employment opportunities requires a better understanding of each of these elements of economic and social behaviour.

A theory of the spatial mobility of urban workers provides labour economics and the study of urban labour markets with a new and uniquely urban focus. Urban worker mobility interacts with residential and industrial location patterns to determine the urban spatial structure. In turn, the urban spatial structure influences the labour market through worker mobility. Problems arising from the spatial development of an urban area may be considered and urban initiatives may be formulated. While many studies and authors have promoted this view, no theoretical basis for it has been provided. Thus the study of the spatial mobility of workers seems warranted to investigate the basis for this view and to improve our understanding of the spatial development of urban areas.

1.2 LABOUR MARKETS IN URBAN ECONOMIES

Our focus is the urban labour market, an important and sometimes neglected element in urban analysis. This focus provides a new perspective to analyse traditional urban concerns including poverty, transportation, housing, and local government finance. There are few urban economic issues that do not involve the labour market in a fundamental way.

Urban areas are often defined in labour market terms. Commuting patterns provide a common criterion to delineate urban boundaries in the United States (the Standard Metropolitan Statistical Area or SMSA), the United Kingdom (the Standard Labour Market Area or SMLA), and Canada (the Census Metropolitan Area or CMA). The criterion requires a stipulated percentage of workers in each county or other administrative area to commute to the designated central business district or core of the urban area. Underlying this definition is the concept of an urban area as a large labour market, providing employers with access to a large and varied workforce and workers with access to a variety of employment opportunities.

One can think of the urban area as a labour market in two ways. First, one can think of the urban area as a single labour market. Many empirical analyses use urban areas as the unit of observation for distinct labour markets (Bowen and Finegan, 1969; Freeman, 1982; Topel, 1986). Secondly, the urban area may be viewed as a group of local labour markets which interact and which have a common employment centre or central business district. The manner in which these labour markets interact depends upon the spatial mobility of workers within the urban area. Attention then shifts to residential and workplace location decisions, transportation and commuting decisions, and the spatial structure of an urban area. It is this second perspective which is featured in this study.

Labour market analysis is crucial to understand such important urban problems as poverty. Physical deterioration of neighbourhoods and communities, lack of services, and the tax revenue constraints that limit public response to these problems reflect the spatial concentration of the poor within urban areas. This poverty is in turn closely associated with inadequate earning opportunities—a labour market problem. Chronic unemployment, low wages, and sporadic work patterns are the norm rather than the exception in these areas. While some of the poverty may be short-lived, in other cases it is a way of life sometimes referred to as the poverty trap.

Many argue, however, that the problem is not only a poverty trap but a cultural trap as well (Moynihan, 1968; Doeringer and Piore, 1971). Inadequate earnings opportunities foster social alienation, including loss of self-esteem, personal ambition, and respect for social values. This alienation in turn makes it difficult for the poor to take advantage of the few good employment opportunities that do arise. Criminal activity and idleness are the common responses to the sur-

plus time available, rather than neighbourhood rejuvenation even if funds are available. In this view, better employment opportunities can provide both the funds and the social climate for urban renewal. Improvements in transportation and other local services would be expected to follow in response to increased demand and greater local tax revenue. It would be inappropriate, however, to expect these service improvements to generate employment opportunities themselves.

The importance of the labour market as a component of urban analysis reflects its general significance in economic and social analysis. The labour market is a crucial element in modern macroeconomic analysis. The roles of transaction costs and institutions in the labour market as impediments to the wage flexibility needed to reduce unemployment have been studied extensively, although considerable controversy remains. This controversy extends to microeconomic analysis where a vigorous academic and policy debate about the extent and significance of labour market segmentation and job rationing has been sustained. Explicit or implicit theories of the labour market—reflecting views on the nature of unemployment, the distribution of earnings, and real and nominal wage growth—form an integral part of modern economic and social thought.

It is not surprising, therefore, that many researchers concerned with urban problems should turn to the analysis of urban labour markets. In one of the early studies of the urban economy, Thompson (1965) concludes that

[T]he local labour market is a (perhaps the) main arena in which urban economic issues must be resolved... Urban managerial economics seems destined to become heavily involved in labour market analysis and employment planning, the perfunctory role accorded to it at present notwithstanding.

Thompson emphasizes information services to assist job search, general career education, and vocational training—all of which are important aspects of the treatment of the urban labour market in this study. Other American studies include Rees and Shultz's (1970) pioneering study of wages in Chicago and Ginzberg's (1968, 1973) extensive and thoughtful analysis of employment problems and policies in New York City. In the United Kingdom it would include Metcalf and Richardson's (1980) study of unemployment in London. In developing countries it would include Mohan's (1986) study of Bogotá, Colombia for the World Bank. The list is too long to attempt to be comprehensive.

In a sense, however, urban labour market analysis has been neglected. These studies primarily use existing labour market theory to analyse a particular urban area and a uniquely urban perspective is not formulated. As a result no uniquely urban insights are obtained. The conclusions are generally applicable to large and small urban areas and rural communities alike. The urban area is a useful data base and convenient policy focus but nothing more.

This neglect is directly related to the issues raised in the previous section. Workplace location decisions have been cited as an important factor ignored by conventional analysis of urban structure and commuting. The spatial mismatch hypothesis postulates that labour market performance somehow depends upon urban structure. In each of these cases, however, a model of the urban labour market and worker mobility is needed to explain how workers find, or do not find, jobs within cities. Until such a model is developed and tested, these arguments will remain justifiably weak in the eyes of most urban analysts.

Ginzberg (1985: 686) warns us of the serious consequences of this neglect:

Although Adam Smith warned about the immobility of labour, most of his followers have used a labor market model that assumes that people, like capital, will flow quickly to wherever the returns are higher. We have learned during these last several decades, however, that large and persistent differences in the population-to-employment ratio and the unemployment rate can persist between central cities, with their large concentration of poor minorities, and the suburbs... What is clear is that if society decides not to intervene, many vulnerable workers may be forced into a marginal relationship to the labor market for the whole of their working careers, since the market adjustment process may require a generation or two.

The question remains whether there is a uniquely urban aspect to labour market problems that occur in cities. Hall's (1981) report of the Inner Cities Working Party in the United Kingdom summarizes the research issues quite well. The report sees economic progress, involving growth and decline, as concentrated spatially both within and among urban areas. A major problem in this context is labour market adjustment, or worker mobility, in which 'many of the so-called rigidities... have a specific local and spatial dimension... including for example the location of homes and workplaces' (p. 133).

The important research questions, from a uniquely urban standpoint, are the influence of urban structure on these labour market problems and the scope for urban or local policies to combat these problems in ways that national programmes cannot. This is the neglected issue that this study seeks to address by providing an urban context to labour market analysis.

It is worth noting that the Hall report anticipates and approves the approach taken in this study. In one particularly lucid passage the report states:

Especially within the conurbations, there is a need to study the phenomenon of local labour markets—the areas within which workers will normally look for work. At any one moment these are fixed absolutely by the time and money that members of the labour force are willing and able to expend on the journey to work, but may also be constrained by their perceptions of employment opportunities. A very large conurbation like London may not be by any means a single local labour market in this sense, particularly for the less-skilled and lower-paid occupational groups: in the economic jargon, they may have tight spatial indifference curves. (p. 140)

In other words, the urban area consists of a series of local labour markets within which worker mobility is limited by their perceptions of employment opportunities.

A recent thoughtful assessment of the spatial mismatch problem for young workers in inner cities agrees with the perspective taken by the Hall report:

The key question, then, is whether search and commuting costs for young people in the inner city are costly. And certainly, such a scenario is plausible. Transportation costs may be very high... An even more plausible story is one that emphasizes the high cost of initial job search outside the neighborhood... the job search process of teenagers may rely heavily on informal networks, which may dissipate with distance. (Ellwood, 1986: 155-6)

We now turn to this research agenda, beginning with a chapterby-chapter outline of the study.

1.3 AN OUTLINE OF THE STUDY

The defining characteristic of cities is their spatial concentration of population, and spatial structure is fundamental to any urban theory. Chapter 2 examines urban spatial economic theory as a foundation for the remainder of the study. It reviews the well-developed theories of residential choice and enterprise location and concentrates on the important and pervasive phenomenon of employment decentralization within cities. The evidence for this approach is broadly assessed