

# Urban Labor Economics

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## PREFACE

It is commonly observed in OECD countries that unemployment is unevenly distributed among cities. The incidence of unemployment varies between the regions of a country (Isserman et al., 1986, Gordon, 1987, Blanchflower and Oswald, 1994), between cities of different sizes and functions (Marston, 1985), between the inner and outer areas of cities and between the urban and rural areas. There are also stark spatial differences in incomes. For example, in the United States, the median income of central city residents is 40 percent lower than that of suburban residents. This has renewed the interest in the spatial dimension of unemployment and, more generally, of the labor market.

If one consults the U.S. Bureau of the Census, one observes that in large U.S. cities the unemployment rate is higher in the city-center than in the suburbs. This is due, in particular, to the fact that U.S. city-centers are generally characterized by ghettos and poverty. Even if the European situation is more complex and not uniform, the general tendency is similar but reverse. Indeed, poor and unemployed workers tend to reside at the outskirts of the city while rich workers tend to live close to the city-center.

The spatial concentration of unemployment and poverty make the workings of urban labor markets a vital concern of urban residents. Despite this, very few theoretical attempts have been made to better understand the working of the urban labor market and, in particular, urban unemployment and its spatial

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differences. Indeed, labor economists and macroeconomists traditionally do not incorporate space directly into their studies (see e.g. Layard et al., 1991; Pissarides, 2000; Cahuc and Zylberberg, 2004), even though there are some well-known empirical studies of local labor markets (see e.g. Holzer, 1989; Eberts and Stone, 1992). Similarly, in urban economics, despite numerous empirical studies, the theory of urban labor economics has been relatively neglected. In most advanced urban textbooks (see, in particular, Fujita, 1989; Fujita et al. 1999; Fujita and Thisse, 2002) it is mainly assumed throughout perfect competition in the labor market and the issue of urban unemployment is not even discussed.

I believe that we need to fathom the way labor markets work in cities, in particular, the way wages and unemployment are determined. This will eventually help us to better understand urban ghettos and to design the adequate policies to fight against these urban problems.

This book is mainly based on my own research over the last fifteen years, even though I'm also discussing other related urban labor models. It has to be clear that this book is focusing on *urban* labor economic theory, i.e. papers that explicitly model both the land/housing market (where both the location of workers and the price of land/housing are endogenous) and the labor market (where both wages and unemployment are endogenous) and analyze their interaction. There are obviously regional models (like, for instance, in the migration and the economic geography literatures) that deal with regional labor markets, where a city/region is a point. This is not what this book is about.

This book is about urban labor market theory and as such deals with two different markets. This is a difficult task because it brings together two different branches of economics: labor and urban economics. This is why it is crucial for the reader to master the modelling of these two markets and this takes a large part of the book; in fact the two first parts. Indeed, in parts 1 and 2, we focus respectively on search-matching and efficiency wage models, which are the main theories available today to explain the labor market. Each part has exactly the same structure. In each part, we start with the standard urban framework of monocentric cities (chapters 1 and 4) and see how the labor market affects and is affected by this urban structure. Both chapters 1 and 4 describe the standard models of urban labor economics, focusing either on search matching (chapter 1) or efficiency wages (chapter 4). Then, in chapters 2 and 5, we expose the different possible extensions of these standard models,

keeping the same spatial monocentric city structure. Finally, in the last chapter of each part (chapters 3 and 6), we deal with non-monocentric (polycentric) cities. We show, in particular, how this polycentric structure, which is more and more common in modern cities (e.g. Los Angeles), affects the labor market outcomes of workers and how the latter, in turn, affects the spatial structure of the city. In these chapters, we also deal with agglomeration economics and in, particular, with the endogenous formation of monocentric city with endogenous wages and unemployment.

After these two first parts, the reader should be able to master the main tools and have a clear understanding of the way urban labor economic models work. It is only then that we deal with applied and policy-relevant issues. Indeed, as already noted above, (big) cities are characterized by uneven distributions of unemployment and poverty. In particular, some areas (inner-cities in the US) cumulate poverty, low-skilled workers, few jobs and a high proportion of ethnic workers. This is particularly true in most American cities, which exhibit a high level of racial segregation and stark socioeconomic disparities between neighborhoods. In particular, white city dwellers experience much better labor-market outcomes than blacks. An important debate has focused on the existence of a possible link between residential segregation and the adverse labor-market outcomes of racial minorities. Empirical studies have shown that such a link exists (see, for instance, Cutler and Glaeser, 1997). However, it remains unclear which economic mechanisms account for the link. It is thus crucial for policy makers to understand in a deep way the causes and consequences of these poverty pockets and how they can be dealt appropriately with. For that, we need a proper theoretical approach that incorporates both land and labor markets. Indeed, it is because they are located in specific areas that these groups of workers (minorities) experience adverse labor market outcomes. Also it is because they experience high unemployment rates and earn low wages when employed that they are “forced” to live in these run-down areas because they cannot afford to reside in better areas. So any policy, which would like to address these problems, should be based on urban labor economic models. So basically we will use the tools and the models exposed in the first two parts of this book to address the issue of poverty and adverse labor market outcomes of ethnic minority workers in ghettos.

Indeed, as Eberts (1994) put it: “Urban labor markets are characterized by the spatial proximity of households and businesses, which offers firms and workers advantages that lead to more efficient markets, enhanced productivity,

and greater economic success.” But, by offering the greatest opportunity for economic success, cities attract both the most talented and successful individuals and the most disadvantaged (Glaeser et al., 2000). This is the paradox of cities since they stand as a stark dichotomy of those who have succeeded and those who have not. This is particularly true for ethnic minorities, like Blacks and Hispanics in the US or Indians, Pakistanis and Bangladeshis in the UK, whose earning gap with whites is quite large (for example, in the US, in 1991, black household median income was 60 percent of white household income). One popular explanation is that, for minorities and low-skill workers, the access to the urban labor market is impeded by physical barriers of spatial isolation. This is what we investigate in the first chapter of part 3 (chapter 7) where we address the so-called spatial mismatch hypothesis, initiated by Kain (1968), which stipulates that residing in urban segregated areas distant from and poorly connected to major centers of employment growth, minority workers face strong geographic barriers to finding and keeping well-paid jobs. In the U.S. context, where jobs have been decentralized and blacks have stayed in the central part of cities, the main conclusion of the spatial mismatch hypothesis is to put forward the distance to jobs as the main culprit for the high unemployment rates and low earnings among blacks. Since the study of Kain, hundreds of studies have been carried out trying to test the spatial mismatch hypothesis (see, in particular, the literature surveys by Holzer, 1991, Kain, 1992, Ihlanfeldt and Sjoquist, 1998). The weight of the evidence suggests that bad job access indeed worsens labor-market outcomes, especially for ethnic minorities, confirming the spatial mismatch hypothesis.

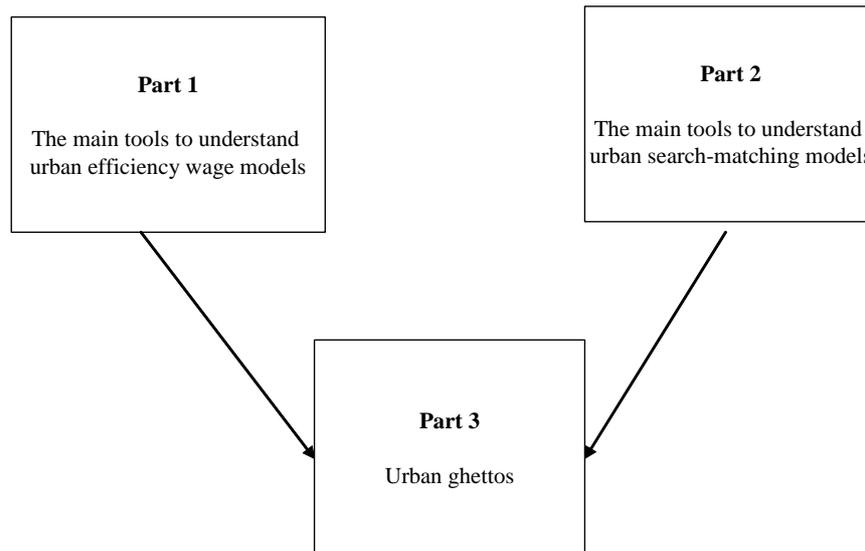
In chapter 7, we will use the efficiency wage and the search matching approaches to give some microeconomic foundation of the spatial mismatch hypothesis. In particular, we will show that workers may refuse jobs that involve commutes that are too long because commuting to that job would be too costly in view of the proposed wage. We will also show that if workers’ productivity negatively depends on distance to jobs then employers may discriminate against residentially segregated workers because of the stigma or prejudice associated with their residential location. In chapter 8, we will show that workers’ job search efficiency may decrease with distance to jobs and, in particular, workers residing far away from jobs may have few incentives to search intensively. In that case, distance to jobs can be harmful because it implies low search intensities.

Clearly distance to jobs is crucial to understand why ethnic minorities

experience adverse labor market outcomes. But this is not the whole story. There are other elements at stake since even when black workers live close to jobs (e.g. in New York city), they still have problem of finding a job. Social networks is obviously and important part of the story and is not always related to distance to jobs. In chapter 8, we investigate the issue of labor market networks in cities and explain why ethnic minorities may experience adverse labor market outcomes, even if they live close to jobs.

Labor discrimination and prejudices, identity and assimilation, cultural transmission are also important elements that should also matter in explaining these pockets of poverty of ethnic minorities. In the last chapter of this book (chapter 9), we deal with this issue in an urban/spatial framework. How cultural transmission of identity affects the labor market outcomes of ethnic minority workers? How negative prejudices can be self-fulfilling and reduce the incentive for minority parents to educate their offsprings? Using some of the tools of parts 1 and 2, these are the questions that we will answer in this last chapter.

In a nutshell, the way this book has been written can be described in the figure below. In parts 1 and 2, I give the main theoretical ingredients to understand the way urban economic theory works. In part 1, I focus on urban search-matching models while in part 2, the focus is on urban efficiency wage models. Each part has the same structure. It has three chapters: The first chapter is about the benchmark model, the second chapter about the extensions of the benchmark model and the third chapter addresses the issue of non-monocentric cities. Once the reader has mastered the theoretical tools of parts 1 and 2, I show him/her how we can use these tools to address the issue of urban ghettos in part 3. In this part, chapter 7 gives some theoretical foundations for a well-established empirical fact: the spatial mismatch hypothesis using both the efficiency wage and the search matching approaches. In chapter 8, using the same urban framework as in parts 1 and 2, I highlight the role of labor market networks in cities. Finally, in chapter 9, I depart from this approach by focussing on other problems (than distance to jobs and social networks) that ethnic minorities face. In particular, I focus on identities and self-fulfilling prejudices to explain the formation of ghettos and their consequences in the labor market.



The reader is typically a last-year undergraduate/graduate student in economics or a researcher. People in connected fields (sociology, urban planning, regional science, transportation, etc.) as well as policy makers with some background in economics should also be interested, especially in the last part of the book. Indeed, the techniques used in this book are not complicated and are now quite standard, and the main requirement is to be interested in the issues, a good ability to use simple models and algebraic manipulations. I have homogenized the different models and the different chapters of this book by using throughout the same notations and the same type of approach (the bid-rent approach). So the reading should be quite smooth. I have also added different appendices that should help the reader in understanding the different chapters of this book.

Last but not least, this is the first book on this topic. To the best of my knowledge, there has been previously only one book, written by Simpson (1992), which contains some theory on urban labor markets, but without explicitly modelling the land market. Also, I think this is the first time that an economist has written a book (or more precisely a large part of a book; here part 3) on urban ghettos from a theoretical viewpoint.

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