

Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

Regional Science and Urban Economics

journal homepage: www.elsevier.com/locate/regec

Book review

Urban Labor Economics, Yves Zenou, Cambridge University Press, New York, USA, 2009

In this superb volume, Yves Zenou builds a bridge between labor economics and urban economics. He uses two types of labor models—search-matching and efficiency wages—to model labor-market imperfections in a spatial context. The book presents the tools necessary to analyze the spatial features of labor markets, using the traditional monocentric model as well as a model of a polycentric city. The author applies the models to address the issue of the adverse labor-market outcomes of ethnic minority workers. Given the near absence of spatial considerations in labor theory and the inattention of urban economists to labor-market imperfections, the book provides a long overdue link between the two fields, meeting the author's goal of bringing urban economics to labor economists and labor economics to urban economists.

Part 1 of the book extends job-search models to include space. Firms post vacancies, and the matching of workers and firms is random, meaning that some workers will remain unemployed even if there are vacant positions. The benchmark model has a monocentric city structure: employed workers commute to the CBD to work, while unemployed workers go to the CBD to search for jobs. The equilibrium spatial structure is determined by the relative frequency of commuting and searching. In the simplest case, the frequency of search is exogenous and lower than the frequency of commuting, so the value of being close to the CBD is higher for employed workers than for unemployed workers. As a result, employed workers outbid unemployed workers for housing near the CBD, and unemployed workers live far from the CBD.

The extension of the benchmark model generates different spatial configurations. When the frequency of job search is endogenous, the model generates several possibilities. First, unemployed workers live close to the CBD, while employed workers live in the outskirts of the city. Second, unemployed workers live either close to or far from the CBD, while employed workers choose intermediate locations. Being close to the CBD enables an unemployed worker to look for jobs more frequently and thus increases the probability of landing a job, and the payoff to access more than offsets the higher land cost. The author also explores the implications of labor heterogeneity and relocation costs. An entire chapter is devoted to the analysis of job searching in a polycentric city, and the author shows the interdependence of spatial structure and labor-market outcomes.

Part 2 of the book incorporates space into models of efficiency wages. As in the model of job search, the author starts with the monocentric model and a basic efficiency-wage structure, and then builds models of increasing complexity. Firms detect the endogenous shirking of workers with some exogenous probability. Firms set the wage rate to ensure that the threat of firing prevents workers from shirking. In a model with endogenous housing consumption, employed workers will occupy land close to the CBD if the gap in commuting frequency (they travel more frequently than the unemployed) is large relative to

the gap in housing consumption (they have higher income and thus consume more housing than the unemployed).

The author extends the basic efficiency-wage model in several ways. First, work effort and thus productivity is assumed to be decreasing in commute distance, presumably because a longer commute is tiring or reduces a worker's flexibility with respect to scheduling. The result is redlining: a profit-maximizing employer computes an optimal recruitment distance, and excludes workers from more distant residential areas. Second, longer commutes affect the labor-leisure tradeoff, influencing the choice of effort and the frequency of unemployment spells. Third, the model is extended to include relocation cost.

Part 3 of the book takes full advantage of the systematic model development in Parts 1 and 2. The author applies his urban labor models to address the issue of the unfavorable labor-market outcomes of ethnic minorities. Chapter 7 applies the search-matching models to show that if distance reduces job information, the isolation of ethnic minorities reduces the efficiency of search, decreasing the probability of employment. If the CBD has a higher fixed entry cost and workers are heterogeneous with respect to their disutility of travel or search costs, central-city residents have higher unemployment rates, and suburban firms create more jobs. The author also explores the implications of modal choice, showing that workers using public transit search less and have less favorable labor-market outcomes. Chapter 8 uses the model of efficiency wages to show the rationale for redlining—a response to spatially generated differences in productivity—and establishes a link between unemployment and racial discrimination in the housing market.

Chapter 9 explores the role of social networks in urban labor markets. Social interactions help unemployed workers find jobs, and workers have strong ties (friends) and weak ties (friends of friends). The quality of a social network in terms of its job information is determined by its strong and weak ties. In the steady-state equilibrium, employed workers tend to befriend employed workers. One implication is that if a particular type of worker is initially unemployed for some historical reason, then in the steady state the worker is likely to be unemployed because the worker's strong ties and weak ties are likely to be unemployed. This approach highlights the importance of weak ties as a bridge across networks. If ethnic minorities are segregated and distant from business districts, most of their job information comes from their strong ties, and unemployment among friends reduces the probability of getting a job.

This informative book sets the stage for further theoretical and empirical work on urban labor markets. The book focuses on two imperfections in the labor market—search-matching and efficiency wages—that generate unemployment. It would be natural to explore the spatial implications of other imperfections, e.g., the minimum wage and unionization. On the empirical side, the book provides a framework for further empirical tests of hypotheses concerning the urban labor market. It would be safe to say that *Urban Labor Economics* has opened a door to new and interesting work, both theoretical and empirical.

Yasuhiro Sato
Graduate School of Economics, Osaka University, 1-7 Machikaneyama,
Toyonaka, 560-0043, Japan
E-mail address: ysato@econ.osaka-u.ac.jp.

7 November 2009