Economics of Agglomeration, Second Edition

Economic activities are not concentrated on the head of a pin, nor are they spread evenly over a featureless plain. On the contrary, they are distributed very unequally across locations, regions, and countries. Even though economic activities are, to some extent, spatially concentrated because of natural features, economic mechanisms that rely on the trade-off between various forms of increasing returns and different types of mobility costs are more fundamental. This book is a study of the economic reasons for the existence of a large variety of agglomerations arising from the global to the local.

This second edition combines a comprehensive analysis of the fundamentals of spatial economics and an in-depth discussion of the most recent theoretical developments in new economic geography and urban economics. It aims to highlight several of the major economic trends observed in modern societies.

Masahisa Fujita, a member of the Japan Academy and the president of Research Institute of Economy, Trade and Industry, has been a major contributor to spatial economic theory during his twenty-year tenure at the University of Pennsylvania and more recently at Kyoto University and Konan University. Professor Fujita is the author or co-author of three books: Spatial Development Planning (1978); Urban Economic Theory (Cambridge University Press, 1989), which remains to this day the most authoritative graduate textbook on urban economics; and The Spatial Economy (1999, co-authored with Paul Krugman and A. J. Venables), which defines the field of new economic geography.


Professors Fujita and Thisse co-authored the first edition of Economics of Agglomeration: Cities, Industrial Location, and Regional Growth (Cambridge University Press, 2002).
Primitive though it may be, every stable society feels the need of providing its members with centers of assembly, or meeting places. Observance of religious rites, maintenance of markets, and political and judicial gatherings necessarily bring about the designation of localities intended for the assembly of those who wish to or who must participate therein.

Henri Pirenne, *Medieval Cities*, 1925
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Preface to the Second Edition

Ever since we completed the first edition of this book, the fields of economic geography and urban economics have grown at a fast pace. The abundance of new and insightful results called for an updating of the first edition. Given this state of affairs, Scott Parris from Cambridge University Press kindly offered us the opportunity to prepare a second edition. The revision is not a minor one. Even though we have chosen to keep the same general organization of the book, all chapters have been rewritten, admittedly to various extents. As a consequence, by reflecting the rapid evolution of the discipline, our book is more comprehensive. However, we want to stress the fact that a large number of recent contributions keep relying on a few basic principles that are sometimes lost in long and sophisticated econometric developments.

Understanding these principles is necessary for our discipline to progress. They also make us realize that seemingly different issues are just the same ones operating at different spatial scales. Although links with empirical works are stressed in many places, the emphasis of the book is still on spatial economic theory. In what follows, we restrict ourselves to highlighting the main changes made in the second edition.

Although a good deal of the material devoted to the Fundamentals of Spatial Economics (Part I) has kept its relevance, the corresponding four chapters involve a fair amount of new material. They also have been revised in the hope of showing how the general principles we want to stress can be applied to a wide range of issues. The Structure of Metropolitan Areas (Part II) did not change much because no major progress took place during the last decade. We have highlighted the relationships between the material presented there and new strands of literature. Some sections have been redrafted to make them more reader-friendly.

By contrast, Factor Mobility and Industrial Location (Part III) has been almost completely rewritten. This is where most of the action has taken place during the last ten years. This part explicitly focuses on the developments that have opened new perspectives and led to new sets of predictions. Chapter 8
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focuses on labor mobility. In addition to the basic core-periphery model, we discuss in great detail new issues, such as the potential function approach, the welfare analysis of the core-periphery model, the role played by land in regional development, the coagglomeration of industries, and the bell-shaped curve of spatial development.

Chapter 9 is new. It covers issues and methodological advances in economic geography that have been studied during the last decade. We use both the linear and constant elasticity of substitution (CES) models of monopolistic competition to revisit classical topics and to explore new ones. In particular, we provide a full and systematic analysis of the home market effect. We also address the case of heterogeneous firms as well as the endogenous determination of the wage structure in settings where capital is footloose and labor sticky. Last, combining monopolistic competition and Marshallian externalities, we study the emergence of industrial clusters.

In the last part, Urban Systems, Regional Growth, and the Multinationalization of Firms (Part IV), we have added some material to Chapter 10, whereas Chapter 11 is essentially new. Chapter 10 has been supplemented with a discussion of how the number and size of cities vary with the level of transport cost. By contrast, Chapter 11 deals with a much broader range of issues than its original counterpart. The sections on regional growth focus on sticky innovations, that is, the case where barriers to technological transfers prevent new goods and services from being produced in territories other than the ones where they have been developed. The remaining part of the chapter explores the international fragmentation of the firm bolstered by the integration of markets as well as the development of containerization and new information and communication technologies. By using a unifying framework, we show how homogeneous firms implement different strategies in conducting their business on foreign markets.