machinery in a non-wage goods industry. Ricardo correctly anticipated the results of general equilibrium analysis of repercussions between the non-wage goods industry and the wage goods industry to show that the wages fund is reduced as a result of the introduction of machinery. Unfortunately, the author seems to fail to recognize the significance of this example. He merely shows that mechanization can be easily done without reducing demand for labour and without making saving from profits, if machines are freely available like manna, or if they are given free by foreign countries. After giving two examples, Ricardo argued further that the demand for labour can be increased if a capitalist or a landlord diverts his revenue from expenditure on a luxury good to the support of retainers or menial servants. The author criticizes, however, this argument of Ricardo by showing that “the demand for labour will be as great as before, even if a capitalist diverts his revenue from expenditure on a luxury good to another good” (pp. 181-182). He does not seem to recognize the difference between productive labour employed by the wages fund to produce goods and unproductive labour employed by the revenue of capitalists and landlords.

The author is perfectly right to insist that there is no unemployment in an equilibrium of an economy in which Say’s law prevails and wages are flexible. He cannot be said, however, to have done justice to Ricardo when he argued that the demand for labour after the introduction of machines is the same as before such an operation was commenced (p. 174).

References

(Takashi Negishi, The University of Tokyo)

Masahisa Fujita, Urban Economic Theory: Land Use and City Size
Cambridge University Press, 1990, pp. xii+366, £35

Urban economics is a field of applied economics mainly focusing upon land market. Especially, land rent or land price is the major analytical category, and is examined in relation to spatial dimensions like distance from the central business district (CBD), lot size, population density, and so forth. It is widely observed in most of modern cities that the land rent, population density, and land use exhibit strong empirical regularities in terms of both statics and dynamics.

This book presents the urban economic theory of land rent, population density, land use, and city size in a unified framework of the ‘bid rent approach,’ which is closely related to the duality theory in microeconomics. Such a unified treatment is very valuable because so far theories of urban economics have been rather ad hoc primarily owing to rapidly increasing various urban problems like congestion of transportation, housing, and office firms.

It consists of two parts. Part I explains the basic theory of urban economics, and Part II extends the theory in consideration to urban externalities. Applications of the theory are kept for a second planned book. Since mathematical expressions are frequently used, it may be difficult for readers who are unfamiliar with differential calculus. However, it may be easier to grasp its essence due to the brief mathematical description of the theories especially for people like Japanese whose mother tongue is not English.

In Part I, Professor Fujita clearly depicts how a city is formed based upon the classical von Thünen’s theory of agricultural rent and Alonso’s theory of location and land use. Modeling consumer’s behavior of location choice, he demonstrates how distributions of urban land rent and population density, land use, and population size of the city are determined endogenously. Although the analysis is purely theoretical, it gives an insightful explanation to the following urban phenomena:

- why are both very poor people and very rich people living near the CBD?
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• why are people with smaller household size living near the CBD?
• why is housing capital more intensively utilized near the CBD than it is in the suburbs?

In a welfare point of view, he investigates the questions below:
• does consumer's utility rise when population, transport cost, income or agricultural rent changes?
• does utility of the poor rise when income of the rich increases?
• is private landownership the same as public landownership in terms of resource allocation?

He also examines the socially optimal allocation of resources in the land market from a viewpoint of welfare economics. In particular, he argues validity of various kinds of tax and subsidy schemes, effect of land use regulations like zoning, and the role of urban developers or city government.

Furthermore, under the provision of these analyses, he then investigates urban agglomeration economies which are generated by spatial aggregate of firms and households. As city size becomes large, households have to be incurred to higher congestion costs and commuting costs. Nevertheless, large cities are realized in many countries because these costs are dominated by agglomeration benefits such as resource and transport advantages, indivisibility and economies of scale, externalities and nonprice interactions, and preference for variety in consumption and production. These causes of city formation are explicated in details.

Part II, on the other hand, contains diverse intriguing topics: local public goods, neighborhood externalities, traffic congestion, external economies, product variety, and city size distribution. These are rigorously analyzed in the unified framework of the basic theory fully explained in Part I, and recent theoretical developments of these topics are well portrayed in order. For instance, the following problems are analyzed:
• how can we efficiently provide local public goods such as parks, libraries and museums?
• how can we attain a first-best or second-best land use configuration in the presence of population congestion, pollution, or racial discrimination?
• how much land should we allocate for roads in the presence of traffic congestion?

He then examines the effects of several urban policies, the examples of which are minimum lot-size zoning regulation, exclusive zoning regulation, road taxation in view of Benthamite welfare theory.

Finally, he presents two types of models. The first model incorporates Marshallian external economies in production whereas the second describes consumer agglomeration economies in a monopolistic competition context. Both models, however, result in the same outcome. He then explores relationships between cities in case of agglomeration economies and diseconomies under free migration. He poses and examines the questions as follows:
• do cities in equilibrium tend to be too large?
• do new towns tend to come into being spontaneously?
• is concentration of retail firms desirable when their diversity raises consumer's utility?

Overall, emphasis is placed upon mathematical analysis of standard monocentric cities. So far as the assumptions are met, results obtained there are correct, and hence can be applied to actual urban policies in principle. Unfortunately, however, such direct applications are possible only to a restricted range of urban problems due to the assumption of the single and spaceless CBD. Quite a large space is needed at the CBD where many urban activities such as production by business firms, consumption at shopping streets, and various market transactions take place. In other words, the existence of cities is ascribed to the roles of the CBD, which should be explicitly taken into account in thoroughly understanding the urban economic system.

I believe that his planned second book would modify the above assumption on the CBD to meet the reality, explain a variety of urban phenomena, and solve many urban problems. My belief may be fairly trustworthy because he had already developed and published several superb theories on several journals. The following are such theories:
• perfect or myopic foresight spatial development process with or without renewal in a growing city,
• land use pattern and its structural transition under
As H. G. Wells once remarked, human history is in essence a history of ideas. Economists die, yet their ideas never die. The aim of Takashi Negishi's new book is to show that the current mainstream theory is not the only possible theory, and that there are many past theories which are still alive and may be in the limelight again. Negishi is without doubt an economist of the highest standing of our time. When young, he was a leading scholar in the analysis of general equilibrium and welfare. He then turned to the microeconomic foundations of Keynesian economics with a glittering success. It is now ripe for him to explore an unduly underdeveloped area—the study of the history of economics from the viewpoint of contemporary theory. This book demonstrates that he is a man of unequaled energy and sets an example to our fellow economists.

The book consists of ten chapters. In Chapter 1, Neigishi gives the reader a brief and useful introduction to the history of economics. As he points out, "the situation of Japan as a non-communist country is unique in the sense that almost half of its academic economists are Marxian" (p. 23). Any non-Japanese reader would be anxious to know why this is so although Negishi abruptly puts an end to it.

Chapter 2 is devoted to some pioneers in economic theory. It is intriguing to choose Locke and Hume instead of Quesnay as precursors of modern economic theory. In Chapter 3, Negishi focuses on Adam Smith, claiming that some important ideas presented by Smith have not been fully developed by modern economic theory yet. Among these underutilized ideas are Smith's proposition that the division of labor is limited by the extent of the market. I may add to say that Smith is well ahead of the times by stating the tendency of human nature to exaggerate the value of a small chance of large winnings.

In Chapter 4, Negish devotes a great deal of space to compare Ricardo and Malthus. Negishi aims to show that "a Mill-neo-classical interpretation of Ricardo cannot be accepted" (p. 138) and that "Malthus is not so much an underconsumptionalist as a supply sider" (p. 152). In Chapter 5, following Chipman, Negishi appreciates J. S. Mill as a great contributor to equilibrium theory.

In my opinion, Chapter 6 on Marx's economics is perhaps the most exciting part of the book. I agree with Negishi that there are many important problems raised by Marx, which cannot be analyzed by linear models. The internal economy of scale is not foreign to Marx. The notion of downwardly sloping demand curves facing firms à la Chamberlin is also contained in Das Kapital. I hope that Negishi will expand his intriguing argument here to write a whole book.

By regarding Chapters 7 and 8 as twin chapters, the reader may think that money matters even in the history of economics, dividing Walrasian economics from non-Walrasian economics. According to Negishi, "Menger's theory of the marketability of commodities is a first attempt at non-Walrasian economics" (p. 286). Concerning famous three causes of the existence of interest, Negishi offers a new interpretation by stressing the third cause, i.e., the superiority of roundabout production.

Chapter 9 discusses the achievements of Gossen, Jevons and Edgeworth in contrast to those of Cournot and Walras. Negishi's notion of an "open coalition" seems to be relevant in reality and has yet to be fully developed. The book ends with an interesting discussion on Marshall in Chapter 10. According to Negishi, Marshall can supply a solid microeconomic foundation to Keynesian economics. Unfortunately, important