# Concentration or Decentralization: Evaluation of Policies

Part III is devoted to the issue of urban concentration and related policy initiatives. Although attention has focused in recent years on decentralization policy, that is by no means the only or major direction of government intervention. This part reviews policies to foster both concentration and deconcentration and brings out the cost of obtaining the desired results. Henderson (chapter 7) discusses the experience with concentration in Brazil, and Lee (chapter 8) and Reif (chapter 9) analyze decentralization policies in Colombia and Korea and in Venezuela, respectively.

## Impetus to Urban Concentration

Chapter 7 deals with the spatial concentration of industry and cities in Brazil and presents the essential principles of industrial location theory and their relevance to Brazil. Small urban areas in Brazil conform to theoretical expectations, but the findings suggest that the central government has in the past promoted the concentration of heavy industry in Greater São Paulo and Rio de Janeiro. According to the author political considerations may have contributed to the past bias in favor of the major urban centers, but there was also a belief that such a policy would foster economic development. The policy's desirability would hinge on whether scale economies exist in large metropolitan areas and, if so, whether they are urbanization or localization economies. Urbanization economies—the benefits of city size in itself, such as the size of the total labor market and the presence of communication networks—would justify concentration. Localization economies—efficiencies in labor markets and services specific to an industry and benefits arising from specialization by firms-would not.

A model is presented that incorporates both urbanization and localization economies, and the results of estimation are reported. The model assumes constant returns to scale with a Hicks-neutral shift factor external to the firm. The shift factor contains a variable that reflects localization economies, as measured by ownindustry employment, and a variable that reflects urbanization economies, as measured by urban population

Two estimating equations derived from the theory are tested for three industries in the region. One equation directly evaluates effects on production, where value added per capita is regressed on the capital-labor ratio, urban population, own-industry labor force size, distance from urban area, labor force quality, and average firm size (which is included to test the assumption of constant returns to scale). The second equation regresses the capital-labor ratio on factor prices, distance to urban area, property taxes, own-industry size, labor quality, and firm size, where the variable for ownindustry size tests the assumption of Hicks neutrality. The author finds no evidence of significant urbanization economies, but he discovers strong support for localization economies, which tend to fall as a sector's labor force grows. Results also appear to justify the assumptions of constant returns to scale and Hicks neutrality. It is concluded that a relaxation of governmentencouraged concentration in Brazil would be beneficial.

### Locational Choice and Decentralization

Chapter 8 addresses employment location policies. Deconcentration policies can be intended to modify location patterns within an urban region or at the national level. The former involve intrametropolitan phenomena, the latter interregional issues. This chapter, which concentrates on intrametropolitan issues, investigates patterns of employment location, introduces an economic apparatus to explain firm location choice, and tests the importance of several policy instruments.

The investigation of employment location describes the spatial distribution of manufacturing, commerce, finance, and services in the Colombian cities of Bogotá and Cali. Evidence is found of industrial decentralization, although not in all sectors. A life-cycle classification of firm development (birth, death, relocation, and stability) reveals the important role of births and deaths in this context. The analysis provides an introduction to contemporary location theory, including developments in stochastic specification. The chapter lists site characteristics which are subject to policy manipulation and reports on statistical tests of their importance for three industries. It concludes with a discussion of a conscious decentralization policy with Seoul, the capital city of the Republic of Korea, as an example.

#### Impact of Decentralization Policy

In light of its experience in the 1970s with government intervention in the spatial distribution of manufacturing industry, Venezuela provides an opportunity to examine the effectiveness of a decentralization policy. Chapter 9 asks whether government instruments, including incentives and restrictions, have contributed to the deconcentration of industry in Venezuela. This question leads to more specific questions. Has deconcentration of industry taken place? Is deconcentration a result of the policy instruments? What other factors have in-

fluenced industrial location, and what has been their relative importance?

The hypothesis that less protected industries are more concerned with locational factors is supported by the evidence. More generally, the model attempts to identify factors that affect the location decisions of firms. Alternative explanatory factors—such as changes in the Venezuelan economy and the unintended spatial effects of trade and macroeconomic policies—arose when little evidence was found that government incentives affected a firm's location. In particular, the study shows that entrepreneurs attach a relatively small weight to government financial incentives.

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