

Contents

LIST OF TABLES xi

LIST OF FIGURES xv

PREFACE xx

Chapter One

INTRODUCTION AND OVERVIEW 1

**What Is Regional Science?. Relation of Regional Science to Other Fields:
What Is Different About Regional Science?. Definition of Regional Science.
The Who of Regional Science. The When and Where of Regional Science.
The How of Regional Science: An Overview of This Book.**

Chapter Two

THE CITY AND REGION: SOME DESCRIPTION 11

Introduction. Relevant Properties of Cities and Regions. Jobs and Adequate Income. The Input-Output Table: A Checkerboard Description of a Region's Economy. Usefulness of the Input-Output Table for Attacking Social and Environmental Problems. Closing Remarks. *Appendix to Chapter 2: An Input-Output Questionnaire.*

Chapter Three

SPATIAL DISTRIBUTIONS, REGIONAL DIFFERENCES AND SOCIAL PROBLEMS 32

Introduction. Discrepancies Between Developed and Underdeveloped Regions. Discrepancies Between Ghetto and Nonghetto Areas in the Metropolitan Region: The Gravity Model Problems from Absentee Ownership and Decision-Making at a Distance. Concluding Remarks. *Appendix to Chapter 3: Further Discussion of the Gravity Model.*

Chapter Four

THE MARKET SYSTEM: ITS WORKINGS 51

Introduction. The Demand Schedule and the Demand Curve. The Supply Schedule and the Supply Curve. The Determination of Wages and Prices in a Competitive Market. Change in Equilibrium Wages and Prices. Imperfect Competition and Market Inadequacies.

Chapter Five

SOME BASIC ELEMENTS OF COST ANALYSIS AND PROFIT MAXIMIZATION 63

Introduction. Cost Curves for a Simple Operation. Scale Economies and Diseconomies. Maximizing Profits and Contributions to Public Welfare. *Appendix to Chapter 5: Derivation of the Industry Supply Curve of a Commodity.*

Chapter Six

COMPARATIVE COSTS AND INDUSTRIAL LOCATION 80

Introduction. The Comparative Cost Approach. Elements of Location Theory.
Cheap Labor Locations. Cheap Power and Other Location Factors.
Appendix to Chapter 6: Factor Substitution and Production Theory.

Chapter Seven

THE BASE, ECONOMIC STRUCTURE, AND DEVELOPMENT OF A CITY OR REGION 112

Introduction. Agglomeration and Deglomeration Economies.
Interindustry Structure and Indirect Effects of Growth. The Construction of an Input-Output Coefficients Table. The Uses of Input-Output Tables.
Checking the Feasibility and Consistency of Development Planning. A Simple Explanation of the Algebra of Input-Output. Other Applications.
History as a Testing Ground. *Appendix to Chapter 7: Equivalence of the Use of a Round-by-Round Expansion and the Inverse Matrix.*

Chapter Eight

TRADE, MIGRATION, SPATIAL FLOWS, AND EXPLOITATION IN OUR MULTI-REGION SOCIETY 157

Introduction. An Interregional Input-Output Snapshot. Cost and Price Analysis for Interregional Trade. Exploitation: Colonialism and Discrimination. Human Migration: Long-Run. A Digression on Environmental Quality, Export Trade and Regional Development.
Population Movement (Migration): Short-Run. Money and Capital Flow: The Migration of Capital Funds. The Flow of Ideas: Communications over Space. The Flow of Intangible, Non-economic Commodities.
Concluding Remarks.

Chapter Nine

PRIVATE AND PUBLIC DECISION-MAKING IN URBAN AND REGIONAL DEVELOPMENT 195

Introduction. The Case of a Location Decision by a Greek Industrialist.
Attitudes of the Greek Industrialist and the Projection of his Behavior.
On Influencing Decision-Making. Decision-Making in Politics: The Case
of a Mayor. External and Internal Payoffs, and Utility. On Influencing
the Decision of the Mayor. The Simple-Minded, Satisficing Political
Leader (Decision-Maker). Concluding Remarks. *Appendix to
Chapter 9.*

Chapter Ten

GAMES, CONFLICTS AND DILEMMAS 223

Introduction. Interdependent Decision-Making and Games.
Satisfaction, Preferences, Utility and Indifference Curves. Objectives and
Best Response Curves. Series of Actions and Reactions, Equilibrium and
Inefficiency. The Prisoner's Dilemma and Related Games. Concluding
Remarks. *Appendix to Chapter 10: Indifference Curve Analysis and
Consumer Theory.*

Chapter Eleven

CONFLICT RESOLUTION AND COOPERATIVE PROCEDURES 265

Introduction. The Conflict over the Desired Efficiency Outcome.
Simple Compromise Solutions. Some More Sophisticated Compromise
Procedures and Guiding Principles. Other Cooperative Procedures and
Guiding Principles. Concluding Remarks.

Chapter Twelve

ORGANIZATIONS: THEIR "WHY, HOW, WHO, WHEN AND WHERE" 281

Introduction. The General Setting: Different Kinds of Organizations.
The Spatial-Regional Hierarchical Structure. Why Organizations Exist.
The How and Who of Organizations. The When and Where of
Organizations: Internal Change and External Adjustment. Concluding
Remarks. *Appendix to Chapter 12: The Theory of Central Places.*

Chapter Thirteen

PUBLIC SECTOR, ACTIVITIES AND WELFARE 317

Introduction. Analysis of Traditional Public Sector Activities.
The Public Sector and Externalities Control and Management. The
Public Sector and Social Justice. Equation of Marginal Social Welfare
and Marginal Social Cost: The Size of the Public Sector. Concluding
Remarks.

Chapter Fourteen

ECONOMIC-ECOLOGIC CONFLICT AND ENVIRONMENTAL QUALITY 341

Introduction. An Input-Output Description of the Combined Economic-
Ecologic System. Recreational Development and Coastal Wetlands: A
Relatively Simple Conflict Problem. Land-Water-Air Quality Management:
A Regional Perspective. Land-Water-Air Quality Management: A
Multi-Regional Perspective.

Chapter Fifteen

DEVELOPMENT THEORY AND SOCIAL WELFARE ANALYSIS 372

The Definition of Regional Development. The Social Welfare Function and
Some Welfare Analysis. Export Industry, Import Substitution,
Externalities, and Other Growth Pole Analyses. Programming Analysis for
the Efficient Allocation of Resources. The Algebra of Programming
Analysis. Regional Development: Conflicts over Basic Values.
Concluding Remarks.

Chapter Sixteen

DEVELOPMENT THEORY, COALITION ANALYSIS AND CONFLICT RESOLUTION 396

Introduction. Regional Development: Conflict over Basic Goals.
Regional Development: Conflict over Programs. Coalition Analysis and
Conflict Resolution Pertaining to Development Policy. Concluding
Remarks.

Chapter Seventeen

REGIONAL SCIENCE IN PRACTICE: A TALE OF PUERTO RICO 434

Introduction. The Setting: Resources and Approaches to Research.
The Notion of an Industrial Complex. The Analysis for Specific Industrial
Complexes. Some Thoughts in Retrospect. Selected Problems from
Economic Development. Operation Serenity: A Thrust for Social
Development. Development and Environmental Degradation.
Concluding Remarks. *Appendix to Chapter 17: Inputs and Outputs for
Selected Oil Refinery, Petrochemical, and Synthetic Fiber Activities.*

Chapter Eighteen

CONCLUDING REMARKS AND SYNTHESIS: SOME ELEMENTS CRITICAL FOR WORLD ORGANIZATION 475

Introduction. The Rationale for World Organization. Some Specific
Functions of a New World Unit. Summary of the Book from a World
Organization View. Concluding Remarks.